

**Flood Control Project Maintenance
Levee Inspections**

Fall 2018 Levee Maintenance Deficiency Summary Report

Overall LMA & Unit Ratings, including DWR Erosion Survey

San Joaquin River Basin

RD0524	Overall LMA Rating	Total LMA Miles						
Reclamation District No. 0524 Middle Roberts Island	U	6.20						
Rated Item	Maintenance Deficiency				Enforcement		Design & System Obsolescence	
	M Miles	U Miles	M + 4U Miles	Threshold %	M Miles	U Miles	M Miles	U Miles
<i>Earthen Levee</i>								
Vegetation	0.01	0.52	2.09	33.72%	0.02	0.10		
Trim / Thin Trees	0.19	0.75	3.19	51.47%	0.01			
Encroachments	0.15	0.03	0.27	4.36%	0.38	0.41		
Animal Control	0.30	0.17	0.98	15.81%				
Slope Stability	0.03	0.01	0.07	1.13%				
Erosion / Bank Caving	0.03	0.07	0.31	5.00%				
Emergency Supplies & Equipment	0.06		0.06	0.97%				
Flood Preparedness & Training	0.06		0.06	0.97%				
<i>Supplemental</i>								
DWR Erosion Survey	0.09	0.28	1.21	19.52%				
DWR UCIP Field Study					0.33	0.01		
DWR UCIP LMA Responsibility								
2017 Storm Damage	0.01		0.01	0.16%				
<i>LMA Totals:</i>	0.93	1.83	8.25	133.11%	0.74	0.52	0.00	0.00

Unit No. 01 San Joaquin River LB	Overall Unit Rating	Total Unit Miles						
RD0524	U	6.20						
Rated Item	Maintenance Deficiency				Enforcement		Design & System Obsolescence	
	M Miles	U Miles	M + 4U Miles	Threshold %	M Miles	U Miles	M Miles	U Miles
<i>Earthen Levee</i>								
Vegetation	0.01	0.52	2.09	33.72%	0.02	0.10		
Trim / Thin Trees	0.19	0.75	3.19	51.47%	0.01			
Encroachments	0.15	0.03	0.27	4.36%	0.38	0.41		
Animal Control	0.30	0.17	0.98	15.81%				
Slope Stability	0.03	0.01	0.07	1.13%				
Erosion / Bank Caving	0.03	0.07	0.31	5.00%				
<i>Supplemental</i>								
DWR Erosion Survey	0.09	0.28	1.21	19.52%				
DWR UCIP Field Study					0.33	0.01		
DWR UCIP LMA Responsibility								
2017 Storm Damage	0.01		0.01	0.16%				
<i>Unit Totals:</i>	0.81	1.83	8.13	131.18%	0.74	0.52	0.00	0.00

**Flood Control Project Maintenance
Levee Inspections****LMA District Cover Sheet****Fall 2018 Levee Inspection Results****Reclamation District No. 0524 Middle Roberts Island**

	Spring (March - May)	Summer ** (June - August)	Fall (September - November)	Winter ** (December - February)
† Overall LMA Rating (Fall Only)			U	

** Non-receipt of Summer or Winter Inspection
Reports may effect overall annual rating.

† **SPRING INSPECTIONS:** Overall maintenance ratings are not determined for the spring inspection results. Individual maintenance deficiencies are rated using the same criteria in the spring and in the fall.

FALL INSPECTIONS: The overall maintenance rating shown above is based on operation and maintenance deficiencies identified within the attached unit inspection reports. This rating is not intended to be an indication of risk.

Comments

**Flood Control Project Maintenance
Levee Inspections**

Unit Cover Sheet

Fall 2018 Levee Inspection Results

Reclamation District No. 0524 Middle Roberts Island

Waterway			Bank	Unit Miles
Unit No. 01 San Joaquin River			Left	6.20
	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)			U	
Date of Inspection	4/24/2018 - 4/24/2018		9/11/2018 - 9/11/2018	
DWR Inspector	Richard Willoughby		Richard Willoughby	
Accompanied By				

Summer & Winter Inspections

The Local Maintaining Agency (LMA) is responsible for summer and winter inspections. The LMA is required to submit a report regarding summer and winter inspections to the California Department of Water Resources (DWR).

DWR must be informed on the:

- a) completion of the inspection
- b) any changes other than the results of normal maintenance
- c) corrections to deficiencies noted in this report

If additional items are noted, further documentation of those items must also be submitted.

The LMA should submit this information to DWR using the LMA web application tool available at:

<http://cdec.water.ca.gov/lma.html>

If the LMA is unable to submit information on this webpage, please contact DWR for assistance.

The LMA should submit the information and any associated documentation by September 30 for summer inspections and March 31 for winter inspections.

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	0.00	Rating **	A	Issue No.	121
LM End	0.00	Issue Type +	Ma	Location *	N/A
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Operations & Maintenance Manuals			°	°
DWR ID	DWR_RD0524_01_s_2012_121				
Comment Code					
Inspector Comment					
The RD has a digital copy of the O&M manual.					

No Photos

LM Start	0.00	Rating **	M	Issue No.	123
LM End	0.00	Issue Type +	Ma	Location *	N/A
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Flood Preparedness & Training			°	°
DWR ID	DWR_RD0524_01_s_2012_123				
Comment Code					
Inspector Comment					
No recent training.					

No Photos

LM Start	0.00	Rating **	M	Issue No.	138
LM End	0.00	Issue Type +	Ma	Location *	N/A
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Emergency Supplies & Equipment			°	°
DWR ID	DWR_RD0524_01_s_2013_138				
Comment Code					
Inspector Comment					
The LMA does not appear to have emergency supplies or equipment.					

No Photos

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	0.14	Rating **	A	Issue No.	237
LM End	0.14	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			37.939774 °	37.939774 °
				-121.344490 °	-121.344490 °
DWR ID	DWR_RD0524_01_f_2017_237				
Comment Code					
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.					
Inspector Comment					
LMA backfilled rodent hole, but no rodent program visible.					

LM Start	0.14	Rating **	A	Issue No.	237 (cont)
LM End	0.14	Issue Type +	Ma	Location *	WS

Photo 1 of 4 : FA_2018_RD0524_107_237_20180906_00329.jpg



Looking northwest at the waterside slope.

Photo 2 of 4 : FA_2018_RD0524_107_237_20180919_00466.jpg



Looking at site staking on waterward shoulder.(Fall 2018)

LM Start	0.14	Rating **	A	Issue No.	237 (cont)
LM End	0.14	Issue Type +	Ma	Location *	WS

Photo 3 of 4 : FA_2018_RD0524_107_237_20180919_00465.jpg



Looking southeast at backfill of rodent holes on waterward slope. (Fall 2018)

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	0.14	Rating **	A	Issue No.	237 (cont)	
LM End	0.14	Issue Type +	Ma	Location *	WS	
Category	Earthen Levee			GPS Latitude/Longitude		
				Start		End
Item	Animal Control			37.939774 °		37.939774 °
				-121.344490 °		-121.344490 °
DWR ID	DWR_RD0524_01_f_2017_237					
Comment Code						
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.						
Inspector Comment						
LMA backfilled rodent hole, but no rodent program visible.						

Photo 4 of 4 : FA_2018_RD0524_107_237_20180919_00467.jpg



Looking east at backfill on waterward slope. (Fall 2018)

LM Start	0.19	Rating **	U	Issue No.	1
LM End	0.19	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR Erosion Survey			37.939085 °	37.939085 °
				-121.343917 °	-121.343917 °
DWR ID	RD0524U01RM40.85				
Comment Code					
Inspector Comment					
09/13/2017: No significant change observed.					
07/25/2016: No significant change observed.					
06/24/2015: No significant change observed.					
06/19/2014: No significant change observed.					
08/13/2013: The erosion was discovered during 2013 spring levee inspection. Inspector comment: Erosion is located along the lower level of water-ward slope. [2017 Site ID:RD0524U01RM40.85]					

Photo 1 of 3 : FA_2018_RD0524_107_1_20180906_00001.jpg



Close view of the erosion.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	0.19	Rating **	U	Issue No.	1 (cont)	
LM End	0.19	Issue Type +	Ma	Location *	WS	
Category	Supplemental			GPS Latitude/Longitude		
				Start		End
Item	DWR Erosion Survey			37.939085 °		37.939085 °
				-121.343917 °		-121.343917 °
DWR ID	RD0524U01RM40.85					
Comment Code						
Inspector Comment						
09/13/2017: No significant change observed.						
07/25/2016: No significant change observed.						
06/24/2015: No significant change observed.						
06/19/2014: No significant change observed.						
08/13/2013: The erosion was discovered during 2013 spring levee inspection. Inspector comment: Erosion is located along the lower level of water-ward slope. [2017 Site ID:RD0524U01RM40.85]						

Photo 2 of 3 : FA_2018_RD0524_107_1_20180906_00002.jpg



Front view of the erosion.

LM Start	0.19	Rating **	U	Issue No.	1 (cont)
LM End	0.19	Issue Type +	Ma	Location *	WS

Photo 3 of 3 : FA_2018_RD0524_107_1_20180906_00003.jpg



Front view of the erosion.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	0.21	Rating **	C	Issue No.	3
LM End	0.21	Issue Type +	Ma	Location *	CR
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Crown Surface / Depressions / Rutting			37.938890 °	37.938890 °
				-121.343657 °	-121.343657 °
DWR ID	DWR_RD0524_01_s_2016_3				
Comment Code					
C2 : Repair depressions or ruts in the crown or slope.					
Inspector Comment					

No Photos

LM Start	0.23	Rating **	U	Issue No.	201
LM End	0.23	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.938648 °	37.938648 °
				-121.343480 °	-121.343480 °
DWR ID	DWR_RD0524_01_f_2016_201				
Comment Code					
T2 : Thin trees to allow visibility of the ground and room to flood fight.					
Inspector Comment					
Untrimmed trees on waterside slope.					

Photo 1 of 1 : FA_2018_RD0524_107_201_20180906_00266.jpg



Looking southeast at the waterside slope.

LM Start	0.27	Rating **	U	Issue No.	179
LM End	0.27	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.938438 °	37.938438 °
				-121.342883 °	-121.342883 °
DWR ID	DWR_RD0524_01_s_2014_179				
Comment Code					
T2 : Thin trees to allow visibility of the ground and room to flood fight.					
Inspector Comment					
Tree blocking view of waterside slope.					

Photo 1 of 1 : FA_2018_RD0524_107_179_20180906_00235.jpg



Looking east at untrimmed tree on waterward slope. (Fall 2016)

*** Location**

LS : Land Side N/A : Not Applicable
WS : Water Side
CR : Crown

**** Rating**

A : Acceptable N : Not Inspected/Rated
M : Minimally Acceptable C : Corrected
U : Unacceptable A/W : Acceptable but Monitor & Maintain

+ Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	0.30	Rating **	C	Issue No.	174
LM End	0.32	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			37.938382°	37.938412°
				-121.342352°	-121.341917°
DWR ID	DWR_RD0524_01_f_2014_174				
Comment Code					
A1 : Exterminate rodents and backfill and compact or grout burrows.					
Inspector Comment					
Several rodent holes were present at this site which the District backfilled.					

No Photos

LM Start	0.34	Rating **	M	Issue No.	2
LM End	0.34	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR Erosion Survey			37.938461 °	37.938461 °
				-121.341526 °	-121.341526 °
DWR ID	RD0524U01RM40.93				
Comment Code					
Inspector Comment					
09/13/2017: There are two pocket erosions at the site; both erosions are around 10 ft long and 6 ft high. [2017 Site ID:RD0524U01RM40.93]					

Photo 1 of 4 : FA_2018_RD0524_107_2_20180906_00004.jpg



Front view of the erosion site.

LM Start	0.34	Rating **	M	Issue No.	2 (cont)
LM End	0.34	Issue Type +	Ma	Location *	WS

Photo 2 of 4 : FA_2018_RD0524_107_2_20180906_00005.jpg



Looking downstream of the erosion.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	0.34	Rating **	M	Issue No.	2 (cont)	
LM End	0.34	Issue Type +	Ma	Location *	WS	
Category	Supplemental			GPS Latitude/Longitude		
				Start		End
Item	DWR Erosion Survey			37.938461 °		37.938461 °
				-121.341526 °		-121.341526 °
DWR ID	RD0524U01RM40.93					
Comment Code						
Inspector Comment						
09/13/2017: There are two pocket erosions at the site; both erosions are around 10 ft long and 6 ft high. [2017 Site ID:RD0524U01RM40.93]						

Photo 3 of 4 : FA_2018_RD0524_107_2_20180906_00006.jpg



Close view of the erosion site.

LM Start	0.34	Rating **	M	Issue No.	2 (cont)
LM End	0.34	Issue Type +	Ma	Location *	WS

Photo 4 of 4 : FA_2018_RD0524_107_2_20180906_00007.jpg



Front view of the erosion.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	0.40	Rating **	M	Issue No.	5
LM End	0.40	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR Erosion Survey			37.938870 °	37.938870 °
				-121.340460 °	-121.340460 °
DWR ID	RD0524U01RM40.99				
Comment Code					
Inspector Comment					
09/13/2017: No significant change observed.					
07/25/2016: More vegetation observed at the site.					
06/24/2015: No significant change observed.					
06/19/2014: No significant change observed.					
08/13/2013: No significant change at this site.					
08/07/2012: The erosion is at the upper levee slope, and likely caused by slope slip. The lower levee slope is covered with dense vegetation.					
[2017 Site ID:RD0524U01RM40.99]					

Photo 1 of 4 : FA_2018_RD0524_107_5_20180906_00011.jpg



Front view of the erosion site.

LM Start	0.40	Rating **	M	Issue No.	5 (cont)
LM End	0.40	Issue Type +	Ma	Location *	WS

Photo 2 of 4 : FA_2018_RD0524_107_5_20180906_00012.jpg



Downstream view of the site.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	0.40	Rating **	M	Issue No.	5 (cont)	
LM End	0.40	Issue Type +	Ma	Location *	WS	
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR Erosion Survey			37.938870 °	37.938870 °	
				-121.340460 °	-121.340460 °	
DWR ID	RD0524U01RM40.99					
Comment Code						
Inspector Comment						
09/13/2017: No significant change observed.						
07/25/2016: More vegetation observed at the site.						
06/24/2015: No significant change observed.						
06/19/2014: No significant change observed.						
08/13/2013: No significant change at this site.						
08/07/2012: The erosion is at the upper levee slope, and likely caused by slope slip. The lower levee slope is covered with dense vegetation.						
[2017 Site ID:RD0524U01RM40.99]						

LM Start	0.40	Rating **	M	Issue No.	5 (cont)
LM End	0.40	Issue Type +	Ma	Location *	WS

Photo 3 of 4 : FA_2018_RD0524_107_5_20180906_00013.jpg



Close view of the erosion.

Photo 4 of 4 : FA_2018_RD0524_107_5_20180906_00014.jpg



Close view of the erosion.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	0.40	Rating **	C	Issue No.	205
LM End	0.46	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			37.938625 °	37.938695 °
				-121.340479 °	-121.339420 °
DWR ID	DWR_RD0524_01_s_2016_205				
Comment Code					
E2 : Schedule repair of erosion site prior to the next inspection.					
Inspector Comment					
Several damaged sites within this reach.					

No Photos

LM Start	0.41	Rating **	U	Issue No.	170
LM End	0.45	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			37.938628 °	37.938688 °
				-121.340385 °	-121.339627 °
DWR ID	DWR_RD0524_01_s_2015_170				
Comment Code					
E2 : Schedule repair of erosion site prior to the next inspection.					
Inspector Comment					
Several slope instabilities within this reach.					

Photo 1 of 2 : FA_2018_RD0524_107_170_20180906_00221.jpg



Looking at slope damage on waterward shoulder (Spring 2016)

LM Start	0.41	Rating **	U	Issue No.	170 (cont)
LM End	0.45	Issue Type +	Ma	Location *	WS

Photo 2 of 2 : FA_2018_RD0524_107_170_20180906_00222.jpg



Looking at waterward slope erosion.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable N : Not Inspected/Rated M : Minimally Acceptable C : Corrected U : Unacceptable A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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Levee Inspection Report By Mile - Fall 2018

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	0.63	Rating **	U	Issue No.	11 (cont)
LM End	0.64	Issue Type +	Ma	Location *	WS

Photo 1 of 2 : FA_2018_RD0524_107_15_20180906_00024.jpg



Front view of the erosion. The erosion is located at the shadow of the vegetation.

* Location	** Rating	+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable N : Not Inspected/Rated M : Minimally Acceptable C : Corrected U : Unacceptable A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	0.63	Rating **	M	Issue No.	15 (cont)	
LM End	0.63	Issue Type +	Ma	Location *	WS	
Category	Supplemental			GPS Latitude/Longitude		
				Start		End
Item	DWR Erosion Survey			37.938247 °		37.938247 °
				-121.336503 °		-121.336503 °
DWR ID	RD0524U01RM41.26					
Comment Code						
Inspector Comment						
09/13/2017: The erosion was discovered by levee inspection. The erosion site is immediately downstream of tall vegetations. [2017 Site ID:RD0524U01RM41.26]						

Photo 2 of 2 : FA_2018_RD0524_107_15_20180906_00025.jpg



Front view of the erosion.

LM Start	0.64	Rating **	C	Issue No.	13
LM End	0.65	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			37.938105°	37.938023°
				-121.336288°	-121.336173°
DWR ID	DWR_RD0524_01_s_2012_13				
Comment Code					
S1 : Repair slope instability.					
Inspector Comment					
Depression extends from shoulder to mid levee slope two site with this section.					

No Photos

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	0.67	Rating **	M	Issue No.	933
LM End	0.67	Issue Type +	En	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			37.937891 °	37.937891 °
				-121.335939 °	-121.335939 °
DWR ID	20592				
Comment Code					
Inspector Comment					
FS_ID:17563 DS_ID:20592 EP_NO: 6035 Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: Flows from primer tank causing erosion on LS slope. FIELD_STRUCT_DESC: 48-inch coated steel sewer pipe through the levee, 7.3 feet below the crown. Siphon pumps and primer tank enclosed by cyclone fence on the landside (LS) shoulder. Gate valve at inlet sump 100 feet off the LS toe. One concrete cutoff wall. (Permit No. 6035, 1968 - City of Stockton). [Additional Reference(s): DWR Levee Log, 2004]. FS Date: 8/16/2013					

LM Start	0.67	Rating **	M	Issue No.	933 (cont)
LM End	0.67	Issue Type +	En	Location *	

Photo 1 of 3 : UCIP_FA_2018_17563_29702.jpg



Signage for effluent pipe on WS shoulder.

Photo 2 of 3 : UCIP_FA_2018_17563_29701.jpg



Siphon Priming tank and associated pipes on LS shoulder.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	0.67	Rating **	M	Issue No.	933 (cont)	
LM End	0.67	Issue Type +	En	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start		End
Item	DWR UCIP Field Study			37.937891 °		37.937891 °
				-121.335939 °		-121.335939 °
DWR ID	20592					
Comment Code						
Inspector Comment						
FS_ID:17563 DS_ID:20592 EP_NO: 6035 Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: Flows from primer tank causing erosion on LS slope. FIELD_STRUCT_DESC: 48-inch coated steel sewer pipe through the levee, 7.3 feet below the crown. Siphon pumps and primer tank enclosed by cyclone fence on the landside (LS) shoulder. Gate valve at inlet sump 100 feet off the LS toe. One concrete cutoff wall. (Permit No. 6035, 1968 - City of Stockton). [Additional Reference(s): DWR Levee Log, 2004]. FS Date: 8/16/2013						

Photo 3 of 3 : UCIP_FA_2018_17563_29700.jpg



Vacuum pumps off LS toe.

LM Start	0.67	Rating **	U	Issue No.	14
LM End	0.67	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.937808 °	37.937808 °
				-121.335913 °	-121.335913 °
DWR ID	DWR_RD0524_01_s_2012_14				
Comment Code					
V2 : Remove the wild growth other than native grasses from the levee slopes.					
Inspector Comment					
Bamboo on waterside slope.Bamboo is dead but blocking view.					

Photo 1 of 1 : FA_2018_RD0524_107_14_20180906_00023.jpg



Looking south at dying bamboo on waterward slope. Fall 2015

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	0.70	Rating **	M	Issue No.	16
LM End	0.70	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR Erosion Survey			37.937577 °	37.937577 °
				-121.335491 °	-121.335491 °
DWR ID	RD0524U01RM41.34				
Comment Code					
Inspector Comment					
09/13/2017: Pocket erosion above the protected levee toe. [2017 Site ID:RD0524U01RM41.34]					

LM Start	0.70	Rating **	M	Issue No.	16 (cont)
LM End	0.70	Issue Type +	Ma	Location *	WS

Photo 1 of 4 : FA_2018_RD0524_107_16_20180906_00026.jpg



Front view of the erosion.

Photo 2 of 4 : FA_2018_RD0524_107_16_20180906_00027.jpg



Close view of the erosion.

LM Start	0.70	Rating **	M	Issue No.	16 (cont)
LM End	0.70	Issue Type +	Ma	Location *	WS

Photo 3 of 4 : FA_2018_RD0524_107_16_20180906_00028.jpg



Looking downstream of the erosion site.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	0.70	Rating **	M	Issue No.	16 (cont)	
LM End	0.70	Issue Type +	Ma	Location *	WS	
Category	Supplemental			GPS Latitude/Longitude		
				Start		End
Item	DWR Erosion Survey			37.937577 °		37.937577 °
				-121.335491 °		-121.335491 °
DWR ID	RD0524U01RM41.34					
Comment Code						
Inspector Comment						
09/13/2017: Pocket erosion above the protected levee toe. [2017 Site ID:RD0524U01RM41.34]						

Photo 4 of 4 : FA_2018_RD0524_107_16_20180906_00029.jpg



Close view of the erosion.

LM Start	0.70	Rating **	A/W	Issue No.	153
LM End	0.70	Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	2017 Storm Damage			37.937500 °	37.937500 °
				-121.335500 °	-121.335500 °
DWR ID	DWR_RD0524_01_f_2017_153				
Comment Code					
Inspector Comment					
Levee Evaluation Comments					
Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.					
Site ID No:541					
Site Designation:LMA-447					
Repair Type: Erosion					
Rating:Area of Concern					
Field Date:8/10/2017					
Notes:					

Photo 1 of 3 : LEVAL_FA_2018_541_4079.jpg

*** Location**

LS : Land Side N/A : Not Applicable
 WS : Water Side
 CR : Crown

**** Rating**

A : Acceptable N : Not Inspected/Rated
 M : Minimally Acceptable C : Corrected
 U : Unacceptable A/W : Acceptable but Monitor & Maintain

+ Issue Type

Ma : Maintenance Deficiency
 Ob : Design & System Obsolescence
 En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	0.70	Rating **	A/W	Issue No.	153 (cont)
LM End	0.70	Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	2017 Storm Damage			37.937500°	37.937500°
				-121.335500°	-121.335500°
DWR ID	DWR_RD0524_01_f_2017_153				
Comment Code					
Inspector Comment					
<p>Levee Evaluation Comments</p> <p>Description: Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.</p> <p>Site ID No: 541</p> <p>Site Designation: LMA-447</p> <p>Repair Type: Erosion</p> <p>Rating: Area of Concern</p> <p>Field Date: 8/10/2017</p> <p>Notes:</p>					

LM Start	0.70	Rating **	A/W	Issue No.	153 (cont)
LM End	0.70	Issue Type +	Ma	Location *	

Photo 2 of 3 : LEVAL_FA_2018_541_4080.jpg



Photo 3 of 3 : LEVAL_FA_2018_541_4083.jpg



<p>* Location</p> <p>LS : Land Side N/A : Not Applicable</p> <p>WS : Water Side</p> <p>CR : Crown</p>	<p>** Rating</p> <p>A : Acceptable N : Not Inspected/Rated</p> <p>M : Minimally Acceptable C : Corrected</p> <p>U : Unacceptable A/W : Acceptable but Monitor & Maintain</p>	<p>+ Issue Type</p> <p>Ma : Maintenance Deficiency</p> <p>Ob : Design & System Obsolescence</p> <p>En : Enforcement</p>
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	0.71	Rating **	M	Issue No.	17
LM End	0.73	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR Erosion Survey			37.937222 °	37.937222 °
				-121.335277 °	-121.335277 °
DWR ID	RD0524U01RM41.36				
Comment Code					
Inspector Comment					
09/13/2017: No significant change observed.					
07/25/2016: No significant change observed.					
06/24/2015: The erosion site is immediately downstream of the RR bridge. [2017 Site ID:RD0524U01RM41.36]					

LM Start	0.71	Rating **	M	Issue No.	17 (cont)
LM End	0.73	Issue Type +	Ma	Location *	WS

Photo 1 of 3 : FA_2018_RD0524_107_17_20180906_00030.jpg



Front view of the erosion.

Photo 2 of 3 : FA_2018_RD0524_107_17_20180906_00031.jpg



Close view of the erosion.

LM Start	0.71	Rating **	M	Issue No.	17 (cont)
LM End	0.73	Issue Type +	Ma	Location *	WS

Photo 3 of 3 : FA_2018_RD0524_107_17_20180906_00032.jpg



Close view of the erosion.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable N : Not Inspected/Rated M : Minimally Acceptable C : Corrected U : Unacceptable A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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Levee Inspection Report By Mile - Fall 2018

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

Photo 1 of 2 : FA_2018_RD0524_107_157_20180906_00210.jpg




Looking south at slope damage caused by rain runoff on landward slope.

Photo 2 of 2 : FA_2018_RD0524_107_157_20180906_00211.jpg



Looking west at slope damage caused by rain runoff on landward slope.

Photo 1 of 2 : FA_2018_RD0524_107_156_20180906_00208.jpg



11 08 2017

Looking southwest at the landside slope.

Wednesday, December 26, 2018 18:29 **FINAL DATA** Page 19 of 198

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	0.72	Rating **	A/W	Issue No.	154 (cont)							
LM End	0.73	Issue Type +	Ma	Location *								
Category	Supplemental		GPS Latitude/Longitude									
			Start	End								
Item	2017 Storm Damage		37.937200°	37.937100°								
			-121.335300°	-121.335300°								
DWR ID	DWR_RD0524_01_f_2017_154											
Comment Code												
Inspector Comment												
Levee Evaluation Comments Description: Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage. Site ID No: 540 Site Designation: LMA-446 Repair Type: Erosion Rating: Area of Concern Field Date: 8/10/2017 Notes:												

Photo 2 of 3 : LEVAL_FA_2018_540_4088.jpg



LM Start	0.72	Rating **	A/W	Issue No.	154 (cont)
LM End	0.73	Issue Type +	Ma	Location *	

Photo 3 of 3 : LEVAL_FA_2018_540_4089.jpg

*** Location**

LS : Land Side N/A : Not Applicable
 WS : Water Side
 CR : Crown

**** Rating**

A : Acceptable N : Not Inspected/Rated
 M : Minimally Acceptable C : Corrected
 U : Unacceptable A/W : Acceptable but Monitor & Maintain

+ Issue Type

Ma : Maintenance Deficiency
 Ob : Design & System Obsolescence
 En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	0.74	Rating **	M	Issue No.	934	
LM End	0.74	Issue Type +	En	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR UCIP Field Study			37.936951 °	37.936951 °	
				-121.335132 °	-121.335132 °	
DWR ID	20595					
Comment Code						
Inspector Comment						
FS_ID:41463 DS_ID:20595 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Indicator Found UCIP Comments: Appears abandoned and should be done so properly. FIELD_STRUCT_DESC: 2.5-inch telephone conduit of an unknown material through the levee, 2 feet below the crown and under the channel. Conduit visible on the waterside (WS) shoulder. [Additional Reference(s): DWR Levee Log, 2004]. FS Date: 8/16/2013						

Photo 1 of 1 : UCIP_FA_2018_41463_29717.jpg



Conduit visible on WS shoulder next to bridge abutment. Cable appears to be abandoned.

LM Start	0.75	Rating **	U	Issue No.	262
LM End	0.78	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.936813 °	37.936539 °
				-121.335019 °	-121.334863 °
DWR ID	DWR_RD0524_01_s_2012_262				
Comment Code					
V2 : Remove the wild growth other than native grasses from the levee slopes.					
Inspector Comment					
Dense vegetation at landside toe along fence line.					

Photo 1 of 3 : FA_2018_RD0524_107_262_20180906_00347.jpg



Looking northeast at the landside slope.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	0.75	Rating **	U	Issue No.	262 (cont)	
LM End	0.78	Issue Type +	Ma	Location *	LS	
Category	Earthen Levee			GPS Latitude/Longitude		
				Start		End
Item	Vegetation			37.936813 °		37.936539 °
				-121.335019 °		-121.334863 °
DWR ID	DWR_RD0524_01_s_2012_262					
Comment Code						
V2 : Remove the wild growth other than native grasses from the levee slopes.						
Inspector Comment						
Dense vegetation at landside toe along fence line.						

Photo 2 of 3 : FA_2018_RD0524_107_262_20180906_00348.jpg



Looking west at dense vegetation at landward slope and toe fall 2015.

LM Start	0.75	Rating **	U	Issue No.	262 (cont)
LM End	0.78	Issue Type +	Ma	Location *	LS

Photo 3 of 3 : FA_2018_RD0524_107_262_20180906_00349.jpg



Looking west at dense vegetation on landside toe. Spring 2014

*** Location**
LS : Land Side N/A : Not Applicable
WS : Water Side
CR : Crown

**** Rating**
A : Acceptable N : Not Inspected/Rated
M : Minimally Acceptable C : Corrected
U : Unacceptable A/W : Acceptable but Monitor & Maintain

+ Issue Type
Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	0.76	Rating **	U	Issue No.	21
LM End	0.77	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR Erosion Survey			37.936821 °	37.936821 °
				-121.334582 °	-121.334582 °
DWR ID	RD0524U01RM41.39				
Comment Code					
Inspector Comment					
09/13/2017: No significant change observed.					
07/25/2016: No significant change observed.					
06/24/2015: No significant change observed.					
06/19/2014: No significant change observed.					
08/13/2013: No significant change at this site.					
08/07/2012: The site has been visited by boat survey. No significant change observed.					
08/23/2011: The site is located immediately upstream of a Railroad bridge. Dense vegetation at the water line blocks the view of erosion.					
[2017 Site ID:RD0524U01RM41.39]					

LM Start	0.76	Rating **	U	Issue No.	21 (cont)
LM End	0.77	Issue Type +	Ma	Location *	WS

Photo 1 of 4 : FA_2018_RD0524_107_21_20180906_00036.jpg



Front view of the erosion site.

Photo 2 of 4 : FA_2018_RD0524_107_21_20180906_00037.jpg



Front view of the erosion site. Vegetation is visible.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	0.76	Rating **	U	Issue No.	21 (cont)
LM End	0.77	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR Erosion Survey			37.936821 °	37.936821 °
				-121.334582 °	-121.334582 °
DWR ID	RD0524U01RM41.39				
Comment Code					
Inspector Comment					
09/13/2017: No significant change observed.					
07/25/2016: No significant change observed.					
06/24/2015: No significant change observed.					
06/19/2014: No significant change observed.					
08/13/2013: No significant change at this site.					
08/07/2012: The site has been visited by boat survey. No significant change observed.					
08/23/2011: The site is located immediately upstream of a Railroad bridge. Dense vegetation at the water line blocks the view of erosion.					
[2017 Site ID:RD0524U01RM41.39]					

Photo 3 of 4 : FA_2018_RD0524_107_21_20180906_00038.jpg



Front view of the erosion.

LM Start	0.76	Rating **	U	Issue No.	21 (cont)
LM End	0.77	Issue Type +	Ma	Location *	WS

Photo 4 of 4 : FA_2018_RD0524_107_21_20180906_00039.jpg



Front view of the erosion.

*** Location**

LS : Land Side N/A : Not Applicable
 WS : Water Side
 CR : Crown

**** Rating**

A : Acceptable N : Not Inspected/Rated
 M : Minimally Acceptable C : Corrected
 U : Unacceptable A/W : Acceptable but Monitor & Maintain

+ Issue Type

Ma : Maintenance Deficiency
 Ob : Design & System Obsolescence
 En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	0.78	Rating **	M	Issue No.	935
LM End	0.78	Issue Type +	En	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			37.936474 °	37.936474 °
				-121.334830 °	-121.334830 °
DWR ID	20596				
Comment Code					
Inspector Comment					
FS_ID:17571 DS_ID:20596 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: Large hole in pipe at WS toe. Appears abandoned and should be done so properly. FIELD_STRUCT_DESC: 8-inch steel pipe of unknown purpose through the levee, 4 feet below the crown. Pump at the toe of the landside (LS) slope, not found 8/16/13. Siphon breaker in 24-inch corrugated metal riser unit on the waterside (WS) slope. [Additional Reference(s): USACE San Joaquin O&M Manual 7, April 1964, (HLM 0.79)]. FS Date: 8/16/2013					

LM Start	0.78	Rating **	M	Issue No.	935 (cont)
LM End	0.78	Issue Type +	En	Location *	

Photo 1 of 2 : UCIP_FA_2018_17571_29719.jpg



Siphon breaker in 24-inch cmp riser on WS slope.

Photo 2 of 2 : UCIP_FA_2018_17571_29718.jpg



Large hole in pipe at WS toe.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	0.78	Rating **	U	Issue No.	76
LM End	0.78	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.936444 °	37.936444 °
				-121.334797 °	-121.334797 °
DWR ID	DWR_RD0524_01_s_2012_76				
Comment Code					
T1 : Trim trees to at least five feet above ground level.					
Inspector Comment					

Photo 1 of 1 : FA_2018_RD0524_107_76_20180906_00133.jpg



Looking southwest at low hanging tree branches at landside toe.

LM Start	0.79	Rating **	U	Issue No.	239
LM End	0.79	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			37.936413 °	37.936413 °
				-121.334779 °	-121.334779 °
DWR ID	DWR_RD0524_01_f_2017_239				
Comment Code					
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.					
Inspector Comment					

Photo 1 of 1 : FA_2018_RD0524_107_239_20180906_00334.jpg



Looking west at the waterside shoulder.

*** Location**

LS : Land Side N/A : Not Applicable
WS : Water Side
CR : Crown

**** Rating**

A : Acceptable N : Not Inspected/Rated
M : Minimally Acceptable C : Corrected
U : Unacceptable A/W : Acceptable but Monitor & Maintain

+ Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

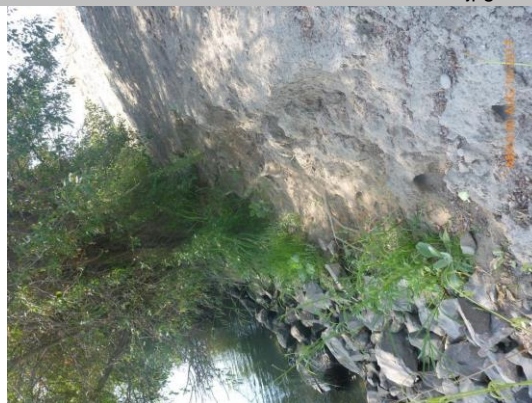
LM Start	0.79	Rating **	M	Issue No.	155
LM End	0.80	Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	2017 Storm Damage			37.936300 °	37.936200 °
				-121.334700 °	-121.334600 °
DWR ID	DWR_RD0524_01_f_2017_155				
Comment Code					
Inspector Comment					
Levee Evaluation Comments					
Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.					
Site ID No:538					
Site Designation:LMA-444					
Repair Type: Erosion					
Rating:Area of Concern					
Field Date:8/10/2017					
Notes:					

Photo 1 of 3 : LEVAL_FA_2018_538_4097.jpg



LM Start	0.79	Rating **	M	Issue No.	155 (cont)
LM End	0.80	Issue Type +	Ma	Location *	

Photo 2 of 3 : LEVAL_FA_2018_538_4098.jpg



* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	0.79	Rating **	M	Issue No.	155 (cont)
LM End	0.80	Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	2017 Storm Damage			37.936300 °	37.936200 °
				-121.334700 °	-121.334600 °
DWR ID	DWR_RD0524_01_f _ 2017_155				
Comment Code					
Inspector Comment					
Levee Evaluation Comments					
Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.					
Site ID No:538					
Site Designation:LMA-444					
Repair Type: Erosion					
Rating:Area of Concern					
Field Date:8/10/2017					
Notes:					

Photo 3 of 3 : LEVAL_FA_2018_538_4099.jpg



LM Start	0.83	Rating **	U	Issue No.	22
LM End	0.84	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR Erosion Survey			37.935930 °	37.935930 °
				-121.334133 °	-121.334133 °
DWR ID	RD0524U01RM41.44				
Comment Code					
Inspector Comment					
09/13/2017: No significant change observed.					
07/25/2016: No significant change observed.					
06/24/2015: No significant change observed.					
06/19/2014: No significant change observed.					
08/13/2013: Site was discovered during boat survey. The dense vegetation blocks a clear view of the erosion. Size of erosion site was very roughly estimated. [2017 Site ID:RD0524U01RM41.44]					

Photo 1 of 2 : FA_2018_RD0524_107_22_20180906_00040.jpg



Front view of the erosion. The tree and vegetation block the view of the site.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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Reclamation District No. 0524 Middle Roberts Island

Close view of the erosion site.

Looking southeast at untrimmed trees on waterward slope. (Spring 2018)

Page 30 of 198

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	0.90	Rating **	A/W	Issue No.	193
LM End	0.91	Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	2017 Storm Damage			37.935400 °	37.935300 °
				-121.333300 °	-121.333200 °
DWR ID	DWR_RD0524_01_f_2017_193				
Comment Code					
Inspector Comment					
Levee Evaluation Comments					
Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.					
Site ID No:537					
Site Designation:LMA-443					
Repair Type: Erosion					
Rating:Serious					
Field Date:8/10/2017					
Notes:					

Photo 1 of 3 : LEVAL_FA_2018_537_4102.jpg



LM Start	0.90	Rating **	A/W	Issue No.	193 (cont)
LM End	0.91	Issue Type +	Ma	Location *	

Photo 2 of 3 : LEVAL_FA_2018_537_4103.jpg



* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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Levee Inspection Report By Mile - Fall 2018

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

Photo 3 of 3 : LEVAL_FA_2018_537_4104.jpg

A photograph showing a dense thicket of green trees and shrubs on the left bank of a river. The foreground is covered in dry, yellowish-brown grass. The river water is calm and reflects the sky. A small orange text overlay in the bottom right corner reads "2018-08-08 10:00".

Photo 1 of 3 : LEVAL_FA_2018_87_1285.jpg

A photograph of a river or lake, likely the Leval River, viewed from a grassy bank. The water is calm and reflects the sky. In the background, a long stone wall runs across the middle ground, with several buildings and a church spire visible behind it. The foreground is dominated by lush green trees and bushes on the right and left sides. The sky is overcast with grey clouds. In the bottom right corner, there is an orange timestamp that reads "AM11:28:00 7/20/17".

* Location	** Rating	+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable N : Not Inspected/Rated M : Minimally Acceptable C : Corrected U : Unacceptable A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	0.91	Rating **	A/W	Issue No.	187 (cont)	
LM End		Issue Type +	Ma	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start		End
Item	2017 Storm Damage			37.935580	°	°
				-121.333200	°	°
DWR ID	DWR_RD0524_01_f_2017_187					
Comment Code						
Inspector Comment						
Levee Evaluation Comments						
Description:						
Site ID No:87						
Site Designation:DWR_RD0524_01_s_2012_99						
Repair Type: Erosion						
Rating:Area of Concern						
Field Date:6/7/2017						
Notes: no observable defects to levee, vegetation blocks ws toe						

LM Start	0.91	Rating **	A/W	Issue No.	187 (cont)
LM End		Issue Type +	Ma	Location *	

Photo 2 of 3 : LEVAL_FA_2018_87_1286.jpg



Photo 3 of 3 : LEVAL_FA_2018_87_1290.jpg

*** Location**

LS : Land Side N/A : Not Applicable
WS : Water Side
CR : Crown

**** Rating**

A : Acceptable N : Not Inspected/Rated
M : Minimally Acceptable C : Corrected
U : Unacceptable A/W : Acceptable but Monitor & Maintain

+ Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	0.91	Rating **	U	Issue No.	29
LM End	0.91	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR Erosion Survey			37.935576 °	37.935576 °
				-121.333202 °	-121.333202 °
DWR ID	RD0524U01RM41.5				
Comment Code					
Inspector Comment					
09/13/2017: No significant change observed.					
07/25/2016: No significant change observed.					
06/24/2015: No significant change observed.					
06/19/2014: No significant change observed.					
08/13/2013: No significant change at this site.					
08/07/2012: The site has been visited by boat survey. No significant change observed					
08/23/2011: The erosion site is immediately downstream of the riprap protection. [2017 Site ID:RD0524U01RM41.5]					

LM Start	0.91	Rating **	U	Issue No.	29 (cont)
LM End	0.91	Issue Type +	Ma	Location *	WS

Photo 1 of 3 : FA_2018_RD0524_107_29_20180906_00050.jpg



Front view of the erosion. Note the riprap protection near the site.

Photo 2 of 3 : FA_2018_RD0524_107_29_20180906_00051.jpg



Close view of the erosion.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	0.91	Rating **	U	Issue No.	29 (cont)	
LM End	0.91	Issue Type +	Ma	Location *	WS	
Category	Supplemental			GPS Latitude/Longitude		
				Start		End
Item	DWR Erosion Survey			37.935576 °		37.935576 °
				-121.333202 °		-121.333202 °
DWR ID	RD0524U01RM41.5					
Comment Code						
Inspector Comment						
09/13/2017: No significant change observed.						
07/25/2016: No significant change observed.						
06/24/2015: No significant change observed.						
06/19/2014: No significant change observed.						
08/13/2013: No significant change at this site.						
08/07/2012: The site has been visited by boat survey. No significant change observed						
08/23/2011: The erosion site is immediately downstream of the riprap protection. [2017 Site ID:RD0524U01RM41.5]						

Photo 3 of 3 : FA_2018_RD0524_107_29_20180906_00052.jpg



Close view of the erosion.

LM Start	0.92	Rating **	U	Issue No.	158
LM End	1.02	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			37.935257°	37.934988°
				-121.332969°	-121.331152°
DWR ID	DWR_RD0524_01_s_2017_158				
Comment Code					
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.					
Inspector Comment					
Multiple large rodent holes along this stretch.					

No Photos

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	0.97	Rating **	M	Issue No.	936	
LM End	0.97	Issue Type +	En	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR UCIP Field Study			37.935178 °	37.935178 °	
				-121.332029 °	-121.332029 °	
DWR ID	20597					
Comment Code						
Inspector Comment						
FS_ID:22724 DS_ID:20597 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: 11/16/2016 - Location may be at LM 0.92 (37.935267, -121.332985) rather than LM 0.974. Need to field verify (DWR UCIP - thatch) 8/16/2013 - Pipe abandoned and should be done so properly. (DWR UCIP -wwylie) FIELD_STRUCT_DESC: *ABANDONED* 14-inch irrigation pipe of an unknown material through the levee, 6 feet below the crown. Concrete pad for pump on the waterside (WS) shoulder. No pump or other appurtenances remain. [Additional Reference(s): DWR Levee Log, 2004. USACE San Joaquin O&M Manual 7, April 1964, (HLM 0.93)]. FS Date: 8/16/2013						

LM Start	0.97	Rating **	M	Issue No.	936 (cont)
LM End	0.97	Issue Type +	En	Location *	

Photo 1 of 3 : UCIP_FA_2018_22724_38442.jpg



Concrete pad for pump mount on WS shoulder.

Photo 2 of 3 : UCIP_FA_2018_22724_38441.jpg



Pipe visible on WS slope.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	0.97	Rating **	M	Issue No.	936 (cont)	
LM End	0.97	Issue Type +	En	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR UCIP Field Study			37.935178 °	37.935178 °	
				-121.332029 °	-121.332029 °	
DWR ID	20597					
Comment Code						
Inspector Comment						
FS_ID:22724 DS_ID:20597 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: 11/16/2016 - Location may be at LM 0.92 (37.935267, -121.332985) rather than LM 0.974. Need to field verify (DWR UCIP - thatch) 8/16/2013 - Pipe abandoned and should be done so properly. (DWR UCIP -wwylie) FIELD_STRUCT_DESC: *ABANDONED* 14-inch irrigation pipe of an unknown material through the levee, 6 feet below the crown. Concrete pad for pump on the waterside (WS) shoulder. No pump or other appurtenances remain. [Additional Reference(s): DWR Levee Log, 2004. USACE San Joaquin O&M Manual 7, April 1964, (HLM 0.93)]. FS Date: 8/16/2013						

Photo 3 of 3 : UCIP_FA_2018_22724_38440.jpg



One way check valve closed on WS slope.

LM Start	0.98	Rating **	A/W	Issue No.	937
LM End	0.98	Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP LMA Responsibility			37.935163 °	37.935163 °
				-121.331887 °	-121.331887 °
DWR ID	20598				
Comment Code					
Inspector Comment					
FS_ID:17575 DS_ID:20598 EP_NO: N/A Repair Type: No Action Needed Crossing Status: Found UCIP Comments: FIELD_STRUCT_DESC: *ABANDONED* 36-inch drainage pipe of an unknown material through the levee, 15 feet below the crown. Landside (LS) end is not visible. Concrete headwall at outlet on the waterside (WS) slope is visible. Pipe appears to be abandoned in place. Slide gate on the WS removed. [Additional Reference(s): DWR Levee Log, 2004. USACE San Joaquin O&M Manual 7, April 1964, (HLM 0.99)]. FS Date: 8/16/2013					

Photo 1 of 2 : UCIP_FA_2018_17575_29736.jpg



Concrete headwall visible on WS slope.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	0.98	Rating **	A/W	Issue No.	937 (cont)	
LM End	0.98	Issue Type +	Ma	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR UCIP LMA Responsibility			37.935163 °	37.935163 °	
				-121.331887 °	-121.331887 °	
DWR ID	20598					
Comment Code						
Inspector Comment						
FS_ID:17575 DS_ID:20598 EP_NO: N/A Repair Type: No Action Needed Crossing Status: Found UCIP Comments: FIELD_STRUCT_DESC: *ABANDONED* 36-inch drainage pipe of an unknown material through the levee, 15 feet below the crown. Landside (LS) end is not visible. Concrete headwall at outlet on the waterside (WS) slope is visible. Pipe appears to be abandoned in place. Slide gate on the WS removed. [Additional Reference(s): DWR Levee Log, 2004. USACE San Joaquin O&M Manual 7, April 1964, (HLM 0.99)]. FS Date: 8/16/2013						

Photo 2 of 2 : UCIP_FA_2018_17575_29735.jpg



Slide gate removed from headwall on WS slope.

LM Start	1.00	Rating **	U	Issue No.	30
LM End	1.00	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR Erosion Survey			37.935410°	37.935410°
				-121.331560°	-121.331560°
DWR ID	RD0524U01RM41.58				
Comment Code					
Inspector Comment					
09/13/2017: No significant change observed.					
07/25/2016: No significant change observed.					
06/24/2015: No significant change observed.					
06/19/2014: No significant change observed.					
08/13/2013: No significant change at this site.					
08/07/2012: The erosion was discovered during the boat survey. [2017					
Site ID:RD0524U01RM41.58]					

Photo 1 of 4 : FA_2018_RD0524_107_30_20180906_00053.jpg



Front view of the erosion.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	1.00	Rating **	U	Issue No.	30 (cont)
LM End	1.00	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR Erosion Survey			37.935410 °	37.935410 °
				-121.331560 °	-121.331560 °
DWR ID	RD0524U01RM41.58				
Comment Code					
Inspector Comment					
09/13/2017: No significant change observed.					
07/25/2016: No significant change observed.					
06/24/2015: No significant change observed.					
06/19/2014: No significant change observed.					
08/13/2013: No significant change at this site.					
08/07/2012: The erosion was discovered during the boat survey. [2017					
Site ID:RD0524U01RM41.58]					

Photo 2 of 4 : FA_2018_RD0524_107_30_20180906_00054.jpg



Close view of the erosion.

LM Start	1.00	Rating **	U	Issue No.	30 (cont)
LM End	1.00	Issue Type +	Ma	Location *	WS

Photo 3 of 4 : FA_2018_RD0524_107_30_20180906_00055.jpg



Front view of the erosion.

LM Start	1.00	Rating **	U	Issue No.	30 (cont)
LM End	1.00	Issue Type +	Ma	Location *	WS

Photo 4 of 4 : FA_2018_RD0524_107_30_20180906_00056.jpg



Downstream view of the erosion.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	1.00	Rating **	A/W	Issue No.	198
LM End	1.01	Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	2017 Storm Damage			37.935100 °	37.935100 °
				-121.331500 °	-121.331300 °
DWR ID	DWR_RD0524_01_f _ 2017_198				
Comment Code					
Inspector Comment					
Levee Evaluation Comments					
Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.					
Site ID No:536					
Site Designation:LMA-442					
Repair Type: Erosion					
Rating:Area of Concern					
Field Date:8/10/2017					
Notes: Appears to be previous repair site adjacent to LMA-442. Large fox den on land side					

Photo 1 of 3 : LEVAL_FA_2018_536_4109.jpg



LM Start	1.00	Rating **	A/W	Issue No.	198 (cont)
LM End	1.01	Issue Type +	Ma	Location *	

Photo 2 of 3 : LEVAL_FA_2018_536_4110.jpg



* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	1.00	Rating **	A/W	Issue No.	198 (cont)
LM End	1.01	Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	2017 Storm Damage			37.935100 °	37.935100 °
				-121.331500 °	-121.331300 °
DWR ID	DWR_RD0524_01_f_2017_198				
Comment Code					
Inspector Comment					
Levee Evaluation Comments					
Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.					
Site ID No:536					
Site Designation:LMA-442					
Repair Type: Erosion					
Rating:Area of Concern					
Field Date:8/10/2017					
Notes: Appears to be previous repair site adjacent to LMA-442. Large fox den on land side					

Photo 3 of 3 : LEVAL_FA_2018_536_4111.jpg



LM Start	1.02	Rating **	U	Issue No.	33
LM End	1.02	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR Erosion Survey			37.935078 °	37.935078 °
				-121.331134 °	-121.331134 °
DWR ID	RD0524U01RM41.59				
Comment Code					
Inspector Comment					
09/13/2017: No significant change observed.					
07/25/2016: No significant change observed.					
06/24/2015: No significant change observed.					
06/19/2014: No significant change observed.					
08/13/2013: No significant change at this site.					
08/07/2012: The site has been visited by boat survey. Site has been repaired, but new erosion occurred at the levee slope and immediately upstream of the repaired site.					
08/23/2011: The site is about 500 ft downstream of bridge. The levee toe seems to be protected, but the protection is being washed away.					
[2017 Site ID:RD0524U01RM41.59]					

Photo 1 of 3 : FA_2018_RD0524_107_33_20180906_00061.jpg



Upstream view of the site.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	1.02	Rating **	U	Issue No.	33 (cont)	
LM End	1.02	Issue Type +	Ma	Location *	WS	
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR Erosion Survey			37.935078 °	37.935078 °	
				-121.331134 °	-121.331134 °	
DWR ID	RD0524U01RM41.59					
Comment Code						
Inspector Comment						
09/13/2017: No significant change observed.						
07/25/2016: No significant change observed.						
06/24/2015: No significant change observed.						
06/19/2014: No significant change observed.						
08/13/2013: No significant change at this site.						
08/07/2012: The site has been visited by boat survey. Site has been repaired, but new erosion occurred at the levee slope and immediately upstream of the repaired site.						
08/23/2011: The site is about 500 ft downstream of bridge. The levee toe seems to be protected, but the protection is being washed away.						
[2017 Site ID:RD0524U01RM41.59]						

LM Start	1.02	Rating **	U	Issue No.	33 (cont)
LM End	1.02	Issue Type +	Ma	Location *	WS

Photo 2 of 3 : FA_2018_RD0524_107_33_20180906_00062.jpg



Close view of the erosion.

Photo 3 of 3 : FA_2018_RD0524_107_33_20180906_00063.jpg



Front view of the site.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	1.02	Rating **	U	Issue No.	238
LM End	1.02	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			37.934991°	37.934991°
				-121.331160°	-121.331160°
DWR ID	DWR_RD0524_01_f_2017_238				
Comment Code					
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.					
Inspector Comment					
Two large rodent holes on landward slope and toe. Large erosion around holes.					

LM Start	1.02	Rating **	U	Issue No.	238 (cont)
LM End	1.02	Issue Type +	Ma	Location *	LS

Photo 1 of 2 : FA_2018_RD0524_107_238_20180906_00330.jpg



Looking east at large rodent hole on landward slope. (Spring 2018)

Photo 2 of 2 : FA_2018_RD0524_107_238_20180906_00332.jpg



Looking northeast at rodent hole on landward slope. (Spring 2018)

*** Location**
LS : Land Side N/A : Not Applicable
WS : Water Side
CR : Crown

**** Rating**
A : Acceptable N : Not Inspected/Rated
M : Minimally Acceptable C : Corrected
U : Unacceptable A/W : Acceptable but Monitor & Maintain

+ Issue Type
Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	1.02	Rating **	A/W	Issue No.	208
LM End		Issue Type +	Ob	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	2017 Storm Damage			37.934840 °	°
				-121.331190 °	°
DWR ID	DWR_RD0524_01_f_2017_208				
Comment Code					
Inspector Comment					
Levee Evaluation Comments					
Description:					
Site ID No:86					
Site Designation:188-47					
Repair Type: Seepage					
Rating:					
Field Date:					
Notes:					

No Photos

LM Start	1.04	Rating **	U	Issue No.	150
LM End	1.04	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			37.934896 °	37.934896 °
				-121.330781 °	-121.330781 °
DWR ID	DWR_RD0524_01_s_2018_150				
Comment Code					
Inspector Comment					
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.					
Large rodent or beaver or nutria hole on waterward shoulder and crown of levee. Over 2 cubic feet of material was observed beside hole.					

Photo 1 of 3 : FA_2018_RD0524_107_150_20180906_00191.jpg



Looking at close-up view of rodent hole on waterward shoulder. (Spring 2018)

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	1.04	Rating **	U	Issue No.	150 (cont)	
LM End	1.04	Issue Type +	Ma	Location *	WS	
Category	Earthen Levee			GPS Latitude/Longitude		
				Start		End
Item	Animal Control			37.934896 °		37.934896 °
				-121.330781 °		-121.330781 °
DWR ID	DWR_RD0524_01_s_2018_150					
Comment Code						
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.						
Inspector Comment						
Large rodent or beaver or nutria hole on waterward shoulder and crown of levee. Over 2 cubic feet of material was observed beside hole.						

LM Start	1.04	Rating **	U	Issue No.	150 (cont)
LM End	1.04	Issue Type +	Ma	Location *	WS

Photo 2 of 3 : FA_2018_RD0524_107_150_20180906_00192.jpg



Looking south at large rodent hole on waterward shoulder. (Spring 2018)

Photo 3 of 3 : FA_2018_RD0524_107_150_20180906_00193.jpg



Looking southeast at large rodent hole on waterward shoulder. (Spring 2018)

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	1.06	Rating **	M	Issue No.	938	
LM End	1.06	Issue Type +	En	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start		End
Item	DWR UCIP Field Study			37.934778 °	37.934778 °	
				-121.330460 °	-121.330460 °	
DWR ID	20600					
Comment Code						
Inspector Comment						
FS_ID:18703 DS_ID:20600 EP_NO: 2725B Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: Given amount of rust on adjacent CMP riser, it may be appropriate to do a video inspection of this pipe. FIELD_STRUCT_DESC: 36-inch concrete encased sewer pipe through the levee, 11.5 feet below the crown. Pump in pump house on the landside (LS). Flap gate on the waterside (WS) end. Two concrete cutoff walls. Siphon breaker in 8-inch corrugated metal riser unit on the LS slope. (Permit No. 2725-B, 1959 - City of Stockton). [Additional Reference(s): DWR Levee Log, 2004. USACE San Joaquin O&M Manual 7, April 1964, (HLM 1.08)]. FS Date: 8/16/2013						

LM Start	1.06	Rating **	M	Issue No.	938 (cont)
LM End	1.06	Issue Type +	En	Location *	

Photo 1 of 2 : UCIP_FA_2018_18703_31243.jpg



8-inch CMP standpipe on LS slope with pumphouse in background.

Photo 2 of 2 : UCIP_FA_2018_18703_31242.jpg



Caution sign on WS shoulder for pipe crossings.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	1.07	Rating **	M	Issue No.	939	
LM End	1.07	Issue Type +	En	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start		End
Item	DWR UCIP Field Study			37.934750 °		37.934750 °
				-121.330405 °		-121.330405 °
DWR ID	20601					
Comment Code						
Inspector Comment						
FS_ID:17589						
DS_ID:20601						
EP_NO: 2725B						
Repair Type: Non-Urgent						
Crossing Status: Found						
UCIP Comments: CMP riser severely corroded. Good indicator of potential condition of 48-inch pipe. Recommend Video Inspection.						
FIELD_STRUCT_DESC: 48-inch corrugated metal sewer line through the levee, 16 feet below the crown. Runs underneath the river and through the levee with 36-inch corrugated metal riser unit/inspection chamber on the landside (LS) shoulder. Distribution/pump house on the LS toe. (Permit No. 2725-B, 1959 - City of Stockton). [Additional Reference(s): DWR Levee Log, 2004. USACE San Joaquin O&M Manual 7, April 1964, (HLM 1.08)].						
FS Date: 8/16/2013						

Photo 1 of 3 : UCIP_FA_2018_17589_29748.jpg



CMP riser for access/inspection on LS slope with distribution/pumphouse on LS toe.

LM Start	1.07	Rating **	M	Issue No.	939 (cont)
LM End	1.07	Issue Type +	En	Location *	

Photo 2 of 3 : UCIP_FA_2018_17589_29747.jpg



Caution sign on WS shoulder.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	1.07	Rating **	M	Issue No.	939 (cont)	
LM End	1.07	Issue Type +	En	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR UCIP Field Study			37.934750 °	37.934750 °	
				-121.330405 °	-121.330405 °	
DWR ID	20601					
Comment Code						
Inspector Comment						
FS_ID:17589 DS_ID:20601 EP_NO: 2725B Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: CMP riser severely corroded. Good indicator of potential condition of 48-inch pipe. Recommend Video Inspection. FIELD_STRUCT_DESC: 48-inch corrugated metal sewer line through the levee, 16 feet below the crown. Runs underneath the river and through the levee with 36-inch corrugated metal riser unit/inspection chamber on the landside (LS) shoulder. Distribution/pump house on the LS toe. (Permit No. 2725-B, 1959 - City of Stockton). [Additional Reference(s): DWR Levee Log, 2004. USACE San Joaquin O&M Manual 7, April 1964, (HLM 1.08)]. FS Date: 8/16/2013						

Photo 3 of 3 : UCIP_FA_2018_17589_29746.jpg



36-inch CMP riser on LS slope severely corroded with various holes along seams.

LM Start	1.07	Rating **	U	Issue No.	18
LM End	1.07	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			37.934715 °	37.934715 °
				-121.330343 °	-121.330343 °
DWR ID	DWR_RD0524_01_s_2012_18				
Comment Code					
S1 : Repair slope instability.					
Inspector Comment					
Slope damage extends from shoulder to middle of slope.					

Photo 1 of 2 : FA_2018_RD0524_107_18_20180906_00033.jpg



Looking south at caving on landward shoulder. (Fall 2015)

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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Levee Inspection Report By Mile - Fall 2018


Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

Photo 2 of 2 : FA_2018_RD0524_107_18_20180906_00034.jpg



Updated view from above the slope stability.

Photo 1 of 1 : FA_2018_RD0524_107_171_20180906_00223.jpg



Looking south at prunings on waterward shoulders.

Photo 1 of 1 : FA_2018_RD0524_107_19_20180906_00035.jpg



Looking southeast at low hanging tree branches at waterside toe.

* Location	** Rating	+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable N : Not Inspected/Rated M : Minimally Acceptable C : Corrected U : Unacceptable A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	1.15	Rating **	U	Issue No.	44
LM End	1.23	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR Erosion Survey			37.933347°	37.933347°
				-121.329110°	-121.329110°
DWR ID	RD0524U01RM41.79				
Comment Code					
Inspector Comment					
09/13/2017: No significant change observed.					
07/25/2016: No significant change observed.					
06/24/2015: No significant change observed.					
06/19/2014: No significant change observed.					
08/13/2013: No significant change at this site.					
08/07/2012: The site has been visited by boat survey. No significant change observed					
08/23/2011: No significant change observed on site.					
09/07/2010: No significant change observed on site. Vegetation is visible at the water line. There is an exposed pipe discharge partially hanging at the mid-slope, possibly still used for discharging irrigation/runoff water. There is minimal rip rap protection along the bank, and what's left of it is no longer adequately protecting the bank.					
9/29/2009: Site consists of a 400-foot long eroding bank with minimal vegetation and protection; the existing rip rap has sloughed, rendering it useless; note that there is an exposed section of a pipe.					
10/18/2006: There is extensive loss of rip rap on some sections; sewage disposal pond is on the landside of the levee; there is an exposed pipe outlet "hanging" from the upper slope. [2017 Site ID:RD0524U01RM41.79]					

LM Start	1.15	Rating **	U	Issue No.	44 (cont)
LM End	1.23	Issue Type +	Ma	Location *	WS

Photo 1 of 4 : FA_2018_RD0524_107_44_20180906_00073.jpg



Direct view of the site.

Photo 2 of 4 : FA_2018_RD0524_107_44_20180906_00074.jpg



Direct view of the site.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	1.15	Rating **	U	Issue No.	44 (cont)	
LM End	1.23	Issue Type +	Ma	Location *	WS	
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR Erosion Survey			37.933347 °	37.933347 °	
				-121.329110 °	-121.329110 °	
DWR ID	RD0524U01RM41.79					
Comment Code						
Inspector Comment						
09/13/2017: No significant change observed.						
07/25/2016: No significant change observed.						
06/24/2015: No significant change observed.						
06/19/2014: No significant change observed.						
08/13/2013: No significant change at this site.						
08/07/2012: The site has been visited by boat survey. No significant change observed						
08/23/2011: No significant change observed on site.						
09/07/2010: No significant change observed on site. Vegetation is visible at the water line. There is an exposed pipe discharge partially hanging at the mid-slope, possibly still used for discharging irrigation/runoff water. There is minimal rip rap protection along the bank, and what's left of it is no longer adequately protecting the bank.						
9/29/2009: Site consists of a 400-foot long eroding bank with minimal vegetation and protection; the existing rip rap has sloughed, rendering it useless; note that there is an exposed section of a pipe.						
10/18/2006: There is extensive loss of rip rap on some sections; sewage disposal pond is on the landside of the levee; there is an exposed pipe outlet "hanging" from the upper slope. [2017 Site ID:RD0524U01RM41.79]						

LM Start	1.15	Rating **	U	Issue No.	44 (cont)
LM End	1.23	Issue Type +	Ma	Location *	WS

Photo 3 of 4 : FA_2018_RD0524_107_44_20180906_00075.jpg



View of the erosion.

Photo 4 of 4 : FA_2018_RD0524_107_44_20180906_00076.jpg



View of the site. Note the tree near the erosion site.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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Levee Inspection Report By Mile - Fall 2018

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

Photo 1 of 1 : FA_2018_RD0524_107_915_20180906_00359.jpg



Looking southwest at dense veg at landward toe and berm. (Fall 2016)

Photo 1 of 3 : LEVAL_FA_2018_535_4115.jpg



A photograph showing a riverbank. On the left, a large, dense green tree stands near the water's edge. The foreground is a steep, eroded bank covered with dry, yellowish-brown grass and numerous dark, angular rocks. The river flows from the left towards the background. In the distance, a low-lying shoreline with some buildings and utility poles is visible under a clear, light blue sky. A timestamp '2018-05-10 10:15' is printed in orange at the bottom right of the image.

Wednesday, December 26, 2018 18:29 **FINAL DATA** Page 53 of 198

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	1.18	Rating **	A/W	Issue No.	221 (cont)	
LM End	1.20	Issue Type +	Ma	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	2017 Storm Damage			37.933500 °	37.933200 °	
				-121.329100 °	-121.328900 °	
DWR ID	DWR_RD0524_01_f_2017_221					
Comment Code						
Inspector Comment						
Levee Evaluation Comments						
Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.						
Site ID No:535						
Site Designation:LMA-441						
Repair Type: Erosion						
Rating:Area of Concern						
Field Date:8/10/2017						
Notes:						

Photo 2 of 3 : LEVAL_FA_2018_535_4116.jpg



LM Start	1.18	Rating **	A/W	Issue No.	221 (cont)
LM End	1.20	Issue Type +	Ma	Location *	

Photo 3 of 3 : LEVAL_FA_2018_535_4117.jpg



* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	1.25	Rating **	A/W	Issue No.	222
LM End	1.30	Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	2017 Storm Damage			37.932600 °	37.931900 °
				-121.328700 °	-121.328400 °
DWR ID	DWR_RD0524_01_f_2017_222				
Comment Code					

Comment Code

Inspector Comment

Levee Evaluation Comments

Description: Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.

Site ID No: 534

Site Designation: LMA-440

Repair Type: Erosion

Rating: Serious

Field Date: 8/10/2017

Notes: site is related to, but not combined with, LMA-439 a portion of this site has been repaired.

LM Start	1.25	Rating **	A/W	Issue No.	222 (cont)
LM End	1.30	Issue Type +	Ma	Location *	

Photo 1 of 3 : LEVAL_FA_2018_534_4121.jpg



Photo 2 of 3 : LEVAL_FA_2018_534_4122.jpg



* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	1.25	Rating **	A/W	Issue No.	222 (cont)	
LM End	1.30	Issue Type +	Ma	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	2017 Storm Damage			37.932600 °	37.931900 °	
				-121.328700 °	-121.328400 °	
DWR ID	DWR_RD0524_01_f_2017_222					
Comment Code						
Inspector Comment						
Levee Evaluation Comments						
Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.						
Site ID No:534						
Site Designation:LMA-440						
Repair Type: Erosion						
Rating:Serious						
Field Date:8/10/2017						
Notes: site is related to, but not combined with, LMA-439 a portion of this site has been repaired.						

Photo 3 of 3 : LEVAL_FA_2018_534_4126.jpg



LM Start	1.25	Rating **	U	Issue No.	263
LM End	1.25	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.932533 °	37.932533 °
				-121.328650 °	-121.328650 °
DWR ID	DWR_RD0524_01_s_2012_263				
Comment Code					
RA : Ramp					
Inspector Comment					
Unauthorized ramps on landside slope. Ramps were caused by vehicle traffic.					

Photo 1 of 2 : FA_2018_RD0524_107_263_20180906_00350.jpg



Looking northwest at unauthorized ramp on landside slope.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	1.25	Rating **	U	Issue No.	263 (cont)	
LM End	1.25	Issue Type +	En	Location *	LS	
Category	Earthen Levee			GPS Latitude/Longitude		
				Start	End	
Item	Encroachments			37.932533 °	37.932533 °	
				-121.328650 °	-121.328650 °	
DWR ID	DWR_RD0524_01_s_2012_263					
Comment Code						
RA : Ramp						
Inspector Comment						
Unauthorized ramps on landside slope. Ramps were caused by vehicle traffic.						

Photo 2 of 2 : FA_2018_RD0524_107_263_20180906_00351.jpg



Looking south at unauthorized ramp on landside slope.

LM Start	1.27	Rating **	A/W	Issue No.	47
LM End	1.30	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR Erosion Survey			37.931858 °	37.931887 °
				-121.328300 °	-121.328343 °
DWR ID	RD0524U01RM41.92				
Comment Code					
Inspector Comment					
5/17/2018. LM 1.30-1.31 was repaired by DWR the remainder of the site was un affected.					
09/13/2017. The erosion has developed along the levee slope. The length of the erosion is nearly doubled comparing to the prior survey.					
07/25/2016: No significant change observed.					
06/24/2015: No significant change observed.					
06/19/2014: No significant change observed.					
08/13/2013: New signs of animal activity were found.					
08/07/2012: The site was first reported in 2012 spring levee inspection report. [2017 Site ID:RD0524U01RM41.92]					

Photo 1 of 4 : FA_2018_RD0524_107_47_20180906_00084.jpg



Front view of the erosion.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	1.27	Rating **	A/W	Issue No.	47 (cont)
LM End	1.30	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR Erosion Survey			37.931858 °	37.931887 °
				-121.328300 °	-121.328343 °
DWR ID	RD0524U01RM41.92				
Comment Code					
Inspector Comment					
5/17/2018. LM 1.30-1.31 was repaired by DWR the remainder of the site was un affected.					
09/13/2017. The erosion has developed along the levee slope. The length of the erosion is nearly doubled comparing to the prior survey.					
07/25/2016: No significant change observed.					
06/24/2015: No significant change observed.					
06/19/2014: No significant change observed.					
08/13/2013: New signs of animal activity were found.					
08/07/2012: The site was first reported in 2012 spring levee inspection report. [2017 Site ID:RD0524U01RM41.92]					

LM Start	1.27	Rating **	A/W	Issue No.	47 (cont)
LM End	1.30	Issue Type +	Ma	Location *	WS

Photo 2 of 4 : FA_2018_RD0524_107_47_20180906_00085.jpg



Front view of the erosion.

Photo 3 of 4 : FA_2018_RD0524_107_47_20180906_00086.jpg



Close view of the erosion.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	1.27	Rating **	A/W	Issue No.	47 (cont)	
LM End	1.30	Issue Type +	Ma	Location *	WS	
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR Erosion Survey			37.931858 °	37.931887 °	
				-121.328300 °	-121.328343 °	
DWR ID	RD0524U01RM41.92					
Comment Code						
Inspector Comment						
5/17/2018. LM 1.30-1.31 was repaired by DWR the remainder of the site was un affected.						
09/13/2017. The erosion has developed along the levee slope. The length of the erosion is nearly doubled comparing to the prior survey.						
07/25/2016: No significant change observed.						
06/24/2015: No significant change observed.						
06/19/2014: No significant change observed.						
08/13/2013: New signs of animal activity were found.						
08/07/2012: The site was first reported in 2012 spring levee inspection report. [2017 Site ID:RD0524U01RM41.92]						

Photo 4 of 4 : FA_2018_RD0524_107_47_20180906_00087.jpg



Front view of the erosion. Note the worsen erosion next to the protected slope.

* Location
LS : Land Side N/A : Not Applicable
WS : Water Side
CR : Crown

** Rating
A : Acceptable N : Not Inspected/Rated
M : Minimally Acceptable C : Corrected
U : Unacceptable A/W : Acceptable but Monitor & Maintain

+ Issue Type
Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	1.29	Rating **	M	Issue No.	940
LM End	1.29	Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP LMA Responsibility			37.931977°	37.931977°
				-121.328401°	-121.328401°
DWR ID	20602				
Comment Code					
Inspector Comment					
FS_ID:53162 DS_ID:20602 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: 10/2/2018 Pipe appears abandoned, but both the pipe and levee appear in good condition; downgrading to Non-Urgent (D. Sanoski - DWR UCIP).11/16/2016 same as previous inspection both ends are open. This pipe does not appear in use. Need to contact owner to determine status of crossing. If the crossing is abandoned or in use, owner will need to coordinate with the CVFPB to comply with Title 23 requirements. (O. Magana - DWR UCIP)08/16/2013 Pipe appears to be open on both ends. Abandoned and should be done so properly. (W. Wylie - DWR UCIP) FIELD_STRUCT_DESC: *ABANDONED* 12-inch steel drainage pipe through the levee, 3.5 feet below the crown. Pipe is opened on the waterside (WS) and landside (LS) ends. The pump house referenced in O&M manual is missing from the LS (2013). [Additional Reference(s): DWR Levee Log, 2004. USACE San Joaquin O&M Manual 7, April 1964, (HLM 1.31)]. FS Date: 10/2/2018 1:10:16 PM					

Photo 1 of 3 : UCIP_FA_2018_53162_29862.jpg



Pipe visible and open on WS slope.

LM Start	1.29	Rating **	M	Issue No.	940 (cont)
LM End	1.29	Issue Type +	Ma	Location *	

Photo 2 of 3 : UCIP_FA_2018_53162_29861.jpg



Pipe open and visible on LS slope.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	1.29	Rating **	M	Issue No.	940 (cont)	
LM End	1.29	Issue Type +	Ma	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR UCIP LMA Responsibility			37.931977°	37.931977°	
				-121.328401°	-121.328401°	
DWR ID	20602					
Comment Code						
Inspector Comment						
FS_ID:53162 DS_ID:20602 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: 10/2/2018 Pipe appears abandoned, but both the pipe and levee appear in good condition; downgrading to Non-Urgent (D. Sanoski - DWR UCIP).11/16/2016 same as previous inspection both ends are open. This pipe does not appear in use. Need to contact owner to determine status of crossing. If the crossing is abandoned or in use, owner will need to coordinate with the CVFPB to comply with Title 23 requirements. (O. Magana - DWR UCIP)08/16/2013 Pipe appears to be open on both ends. Abandoned and should be done so properly. (W. Wylie - DWR UCIP) FIELD_STRUCT_DESC: *ABANDONED* 12-inch steel drainage pipe through the levee, 3.5 feet below the crown. Pipe is opened on the waterside (WS) and landside (LS) ends. The pump house referenced in O&M manual is missing from the LS (2013). [Additional Reference(s): DWR Levee Log, 2004. USACE San Joaquin O&M Manual 7, April 1964, (HLM 1.31)]. FS Date: 10/2/2018 1:10:16 PM						

Photo 3 of 3 : UCIP_FA_2018_53162_29860.jpg



Pipe appears open on both ends. View from LS slope.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	1.33	Rating **	A/W	Issue No.	225
LM End	1.33	Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	2017 Storm Damage			37.931500 °	37.931500 °
				-121.328200 °	-121.328200 °
DWR ID	DWR_RD0524_01_f_2017_225				
Comment Code					
Inspector Comment					
Levee Evaluation Comments					
Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.					
Site ID No:532					
Site Designation:LMA-438					
Repair Type: Erosion					
Rating:Area of Concern					
Field Date:8/10/2017					
Notes:					

Photo 1 of 3 : LEVAL_FA_2018_532_4171.jpg



LM Start	1.33	Rating **	A/W	Issue No.	225 (cont)
LM End	1.33	Issue Type +	Ma	Location *	

Photo 2 of 3 : LEVAL_FA_2018_532_4173.jpg



* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	1.33	Rating **	A/W	Issue No.	225 (cont)							
LM End	1.33	Issue Type +	Ma	Location *								
Category	Supplemental		GPS Latitude/Longitude									
			Start	End								
Item	2017 Storm Damage		37.931500°	37.931500°								
			-121.328200°	-121.328200°								
DWR ID	DWR_RD0524_01_f_2017_225											
Comment Code												
Inspector Comment												
Levee Evaluation Comments Description: Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage. Site ID No: 532 Site Designation: LMA-438 Repair Type: Erosion Rating: Area of Concern Field Date: 8/10/2017 Notes:												

Photo 3 of 3 : LEVAL_FA_2018_532_4174.jpg



LM Start	1.33	Rating **	M	Issue No.	55							
LM End	1.33	Issue Type +	Ma	Location *	WS							
Category	Supplemental		GPS Latitude/Longitude									
			Start	End								
Item	DWR Erosion Survey		37.931510°	37.931510°								
			-121.328120°	-121.328120°								
DWR ID	RD0524U01RM41.95											
Comment Code												
Inspector Comment												
09/13/2017: The erosion is located immediately upstream of a protected levee section. [2017 Site ID: RD0524U01RM41.95]												

Photo 1 of 2 : FA_2018_RD0524_107_55_20180906_00096.jpg



Front view of the erosion.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	1.33	Rating **	M	Issue No.	55 (cont)	
LM End	1.33	Issue Type +	Ma	Location *	WS	
Category	Supplemental			GPS Latitude/Longitude		
				Start		End
Item	DWR Erosion Survey			37.931510 °	37.931510 °	
				-121.328120 °	-121.328120 °	
DWR ID	RD0524U01RM41.95					
Comment Code						
Inspector Comment						
09/13/2017: The erosion is located immediately upstream of a protected levee section. [2017 Site ID:RD0524U01RM41.95]						

Photo 2 of 2 : FA_2018_RD0524_107_55_20180906_00097.jpg



Front view of the erosion.

LM Start	1.39	Rating **	U	Issue No.	56
LM End	1.39	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR Erosion Survey			37.930575 °	37.930575 °
				-121.328090 °	-121.328090 °
DWR ID	RD0524U01RM42.03				
Comment Code					
Inspector Comment					
09/13/2017: No significant change observed					
07/25/2016: No significant change observed					
06/24/2015: No significant change observed.					
06/19/2014: No significant change observed.					
08/13/2013: No significant change observed.					
08/07/2012: The site was first reported in 2012 spring levee inspection					
report. The site is located about 750 ft downstream of SR 4 Bridge.					
[2017 Site ID:RD0524U01RM42.03]					

Photo 1 of 3 : FA_2018_RD0524_107_56_20180906_00098.jpg



Front view of the erosion.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	1.39	Rating **	U	Issue No.	56 (cont)
LM End	1.39	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR Erosion Survey			37.930575 °	37.930575 °
				-121.328090 °	-121.328090 °
DWR ID	RD0524U01RM42.03				
Comment Code					
Inspector Comment					
09/13/2017: No significant change observed					
07/25/2016: No significant change observed					
06/24/2015: No significant change observed.					
06/19/2014: No significant change observed.					
08/13/2013: No significant change observed.					
08/07/2012: The site was first reported in 2012 spring levee inspection report. The site is located about 750 ft downstream of SR 4 Bridge.					
[2017 Site ID:RD0524U01RM42.03]					

Photo 2 of 3 : FA_2018_RD0524_107_56_20180906_00099.jpg



Front view of the erosion.

LM Start	1.39	Rating **	U	Issue No.	56 (cont)
LM End	1.39	Issue Type +	Ma	Location *	WS

Photo 3 of 3 : FA_2018_RD0524_107_56_20180906_00100.jpg



Close view of the erosion.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	1.43	Rating **	A/W	Issue No.	226
LM End	1.44	Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	2017 Storm Damage			37.930100 °	37.929900 °
				-121.328300 °	-121.328300 °
DWR ID	DWR_RD0524_01_f_2017_226				
Comment Code					
Inspector Comment					
Levee Evaluation Comments					
Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.					
Site ID No:530					
Site Designation:LMA-436					
Repair Type: Erosion					
Rating:Area of Concern					
Field Date:8/10/2017					
Notes:					

Photo 1 of 3 : LEVAL_FA_2018_530_4182.jpg



LM Start	1.43	Rating **	A/W	Issue No.	226 (cont)
LM End	1.44	Issue Type +	Ma	Location *	

Photo 2 of 3 : LEVAL_FA_2018_530_4184.jpg



* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	1.43	Rating **	A/W	Issue No.	226 (cont)
LM End	1.44	Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	2017 Storm Damage			37.930100 °	37.929900 °
				-121.328300 °	-121.328300 °
DWR ID	DWR_RD0524_01_f _ 2017_226				
Comment Code					
Inspector Comment					
Levee Evaluation Comments					
Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.					
Site ID No:530					
Site Designation:LMA-436					
Repair Type: Erosion					
Rating:Area of Concern					
Field Date:8/10/2017					
Notes:					

Photo 3 of 3 : LEVAL_FA_2018_530_4185.jpg



LM Start	1.45	Rating **	U	Issue No.	60
LM End	1.47	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR Erosion Survey			37.929650 °	37.929650 °
				-121.328110 °	-121.328110 °
DWR ID	RD0524U01RM42.09				
Comment Code					
Inspector Comment					
09/13/2017: No significant change observed.					
07/25/2016: No significant change observed.					
06/24/2015: No significant change observed.					
06/19/2014: No significant change observed.					
08/13/2013: The site is located approximately 400 ft. downstream SR 4 Bridge. Dense vegetation is visible at the toe. [2017 Site ID:RD0524U01RM42.09]					

Photo 1 of 4 : FA_2018_RD0524_107_60_20180906_00106.jpg



Front view of the erosion site.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	1.45	Rating **	U	Issue No.	60 (cont)	
LM End	1.47	Issue Type +	Ma	Location *	WS	
Category	Supplemental			GPS Latitude/Longitude		
				Start		End
Item	DWR Erosion Survey			37.929650 °	37.929650 °	
				-121.328110 °	-121.328110 °	
DWR ID	RD0524U01RM42.09					
Comment Code						
Inspector Comment						
09/13/2017: No significant change observed.						
07/25/2016: No significant change observed.						
06/24/2015: No significant change observed.						
06/19/2014: No significant change observed.						
08/13/2013: The site is located approximately 400 ft. downstream SR 4 Bridge. Dense vegetation is visible at the toe. [2017 Site ID:RD0524U01RM42.09]						

LM Start	1.45	Rating **	U	Issue No.	60 (cont)
LM End	1.47	Issue Type +	Ma	Location *	WS

Photo 2 of 4 : FA_2018_RD0524_107_60_20180906_00107.jpg



Front view of the erosion.

Photo 3 of 4 : FA_2018_RD0524_107_60_20180906_00108.jpg



Close view of the erosion. Note the vegetation at the site.

LM Start	1.45	Rating **	U	Issue No.	60 (cont)
LM End	1.47	Issue Type +	Ma	Location *	WS

Photo 4 of 4 : FA_2018_RD0524_107_60_20180906_00109.jpg



Close view of the erosion.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	1.49	Rating **	U	Issue No.	916
LM End	1.49	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.929118 °	37.929118 °
				-121.328368 °	-121.328368 °
DWR ID	DWR_RD0524_01_s_2012_916				
Comment Code					
T3 : Trim and thin trees to allow visibility of the ground and room to flood fight.					
Inspector Comment					
Untrimmed trees and dense vegetation on landside toe.					

Photo 1 of 1 : FA_2018_RD0524_107_916_20180906_00360.jpg



Looking at dense trees on landward slope and toe fall 2015

LM Start	1.54	Rating **	M	Issue No.	941
LM End	1.54	Issue Type +	En	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			37.928429 °	37.928429 °
				-121.328297 °	-121.328297 °
DWR ID	20605				
Comment Code					
Inspector Comment					
FS_ID:17798 DS_ID:20605 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Indicator Found UCIP Comments: No permit identified for this crossing. FIELD_STRUCT_DESC: Fiber optics cable crossing of an unknown material. USA marker flags over crown along alignment of gate. FS Date: 8/20/2013					

Photo 1 of 2 : UCIP_FA_2018_17798_29935.jpg



USAA markers along alignment at gate.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	1.54	Rating **	M	Issue No.	941 (cont)	
LM End	1.54	Issue Type +	En	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR UCIP Field Study			37.928429 °	37.928429 °	
				-121.328297 °	-121.328297 °	
DWR ID	20605					
Comment Code						
Inspector Comment						
FS_ID:17798						
DS_ID:20605						
EP_NO: N/A						
Repair Type: Non-Urgent						
Crossing Status: Indicator Found						
UCIP Comments: No permit identified for this crossing.						
FIELD_STRUCT_DESC: Fiber optics cable crossing of an unknown material. USA marker flags over crown along alignment of gate.						
FS Date: 8/20/2013						

Photo 2 of 2 : UCIP_FA_2018_17798_29934.jpg



USAA markers along alignment at gate.

LM Start	1.55	Rating **	U	Issue No.	202
LM End	1.55	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			37.928391 °	37.928391 °
				-121.328273 °	-121.328273 °
DWR ID	DWR_RD0524_01_f_2016_202				
Comment Code					
E2 : Schedule repair of erosion site prior to the next inspection.					
Inspector Comment					
Large hole (looks like fences post or telephone pole) on waterside shoulder.					

Photo 1 of 2 : FA_2018_RD0524_107_202_20180906_00267.jpg



Looking at large hole (Fence/telephone post hole) on waterward shoulder.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	1.55	Rating **	U	Issue No.	202 (cont)	
LM End	1.55	Issue Type +	Ma	Location *	WS	
Category	Earthen Levee			GPS Latitude/Longitude		
				Start		End
Item	Erosion / Bank Caving			37.928391 °	37.928391 °	
				-121.328273 °	-121.328273 °	
DWR ID	DWR_RD0524_01_f_2016_202					
Comment Code						
E2 : Schedule repair of erosion site prior to the next inspection.						
Inspector Comment						
Large hole (looks like fences post or telephone pole) on waterside shoulder.						

Photo 2 of 2 : FA_2018_RD0524_107_202_20180906_00268.jpg



Looking at hole on waterward shoulder.

LM Start	1.56	Rating **	U	Issue No.	62	
LM End	1.62	Issue Type +	Ma	Location *	WS	
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR Erosion Survey			37.927770 °	37.927770 °	
				-121.327870 °	-121.327870 °	
DWR ID	RD0524U01RM42.2					
Comment Code						
Inspector Comment						
09/13/2017: No significant change observed.						
07/25/2016: No significant change observed.						
06/24/2015: No significant change observed.						
06/19/2014: No significant change observed.						
08/13/2013: No significant change observed.						
08/07/2012: The site has been visited by boat survey. No significant change observed						
08/23/2011: No significant change observed on site. Trees concerned still in place.						
09/07/2010: No significant change observed on site. The concern here is the undermining of the levee toe where most of trees are. There are erosion pockets lined along the lower slope and at the base of the trees, exposing tree roots. There is minimal slope protection.						
09/29/2009: The lower slope is lined with minor erosion pockets; some tree roots are exposed; there is visible undermining of the levee toe; site is immediately upstream of the Highway 4 Bridge; the bridge is possibly causing a scour to occur, eroding the bank. [2017 Site ID:RD0524U01RM42.2]						

Photo 1 of 3 : FA_2018_RD0524_107_62_20180906_00111.jpg



Front view of the site where undermining has occurred.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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Levee Inspection Report By Mile - Fall 2018

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	1.56	Rating **	U	Issue No.	62 (cont)
LM End	1.62	Issue Type +	Ma	Location *	WS

A photograph of a pond with a line of trees and a clear blue sky. The water is calm with some ripples. The trees are mostly evergreens, and there's a small white building visible in the background behind the trees. The sky is a clear, bright blue.

Front view of the erosion. Dense vegetation is visible.

* Location	** Rating	+ Issue Type
LS : Land Side	A : Acceptable	Ma : Maintenance Deficiency
N/A : Not Applicable	N : Not Inspected/Rated	Ob : Design & System Obsolescence
WS : Water Side	M : Minimally Acceptable	En : Enforcement
CR : Crown	U : Unacceptable	
	A/W : Acceptable but Monitor & Maintain	

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	1.59	Rating **	A/W	Issue No.	151
LM End	1.61	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			37.927680°	37.927512°
				-121.328004°	-121.327815°
DWR ID	DWR_RD0524_01_s_2018_151				
Comment Code					
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.					
Inspector Comment					
Several large rodent holes on landward slope. Backfilled rodent hole. No rodent program present.					

Photo 1 of 2 : FA_2018_RD0524_107_151_20180906_00194.jpg



Looking at close-up view of large rodent hole on landward slope. (Spring 2018)

LM Start	1.59	Rating **	A/W	Issue No.	151 (cont)
LM End	1.61	Issue Type +	Ma	Location *	LS

Photo 2 of 2 : FA_2018_RD0524_107_151_20180906_00195.jpg



Looking east at large rodent hole on landward slope. (Spring 2018)

LM Start	1.59	Rating **	C	Issue No.	136
LM End	1.59	Issue Type +	Ma	Location *	CR
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			37.927775 °	37.927775 °
				-121.327860 °	-121.327860 °
DWR ID	DWR_RD0524_01_s_2013_136				
Comment Code					
S2 : Repair the levee slope damaged by foot traffic and prevent access where possible.					
Inspector Comment					
Waterside shoulder caving.					

No Photos

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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Reclamation District No. 0524 Middle Roberts Island

LM Start	1.60	Rating **	U	Issue No.	25 (cont)
LM End	1.61	Issue Type +	Ma	Location *	WS

Photo 1 of 3 : FA_2018_RD0524_107_25_20180906_00042.jpg



Looking northwest at dense veg on waterward slope.

Photo 2 of 3 : FA_2018_RD0524_107_25_20180906_00043.jpg



Looking northwest at end of dense veg on waterward slope.

Photo 3 of 3 : FA_2018_RD0524_107_25_20180906_00044.jpg



Looking southwest at dense veg on waterward slope.

* Location	** Rating	+ Issue Type
LS : Land Side	A : Acceptable	Ma : Maintenance Deficiency
N/A : Not Applicable	N : Not Inspected/Rated	Ob : Design & System Obsolescence
WS : Water Side	M : Minimally Acceptable	En : Enforcement
CR : Crown	U : Unacceptable	
	A/W : Acceptable but Monitor & Maintain	

Reclamation District No. 0524 Middle Roberts Island

Looking east at waterward erosion and depression.

Page 75 of 198

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	1.64	Rating **	U	Issue No.	39
LM End	1.64	Issue Type +	En	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.927372°	37.927372°
				-121.327278°	-121.327278°
DWR ID	DWR_RD0524_01_s_2012_39				
Comment Code					
ST : Stairway					
Inspector Comment					
Landowner constructed boat dock without permit.					

Photo 1 of 2 : FA_2018_RD0524_107_39_20180906_00066.jpg



Looking at garbage on waterside slope.

LM Start	1.64	Rating **	U	Issue No.	39 (cont)
LM End	1.64	Issue Type +	En	Location *	WS

Photo 2 of 2 : FA_2018_RD0524_107_39_20180906_00067.jpg



Looking east at non-permitted boat dock.

LM Start	1.65	Rating **	M	Issue No.	207
LM End	1.71	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.927237°	37.926621°
				-121.327183°	-121.326400°
DWR ID	DWR_RD0524_01_s_2016_207				
Comment Code					
LI : Landscape Irrigation					
Inspector Comment					
Sprinklers on landside shoulder					

Photo 1 of 2 : FA_2018_RD0524_107_207_20180906_00273.jpg



* Location		** Rating		+ Issue Type	
LS : Land Side	N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency	
WS : Water Side		M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence	
CR : Crown		U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement	

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	1.65	Rating **	M	Issue No.	207 (cont)	
LM End	1.71	Issue Type +	En	Location *	LS	
Category	Earthen Levee			GPS Latitude/Longitude		
				Start		End
Item	Encroachments			37.927237 °		37.926621 °
				-121.327183 °		-121.326400 °
DWR ID	DWR_RD0524_01_s_2016_207					
Comment Code						
LI : Landscape Irrigation						
Inspector Comment						
Sprinklers on landside shoulder						

Photo 2 of 2 : FA_2018_RD0524_107_207_20180906_00274.jpg



Looking south at sprinkler line and sprinklers on landward shoulder.

LM Start	1.65	Rating **	N	Issue No.	8
LM End	1.68	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.927255 °	37.926855 °
				-121.327137 °	-121.326672 °
DWR ID	DWR_RD0524_01_s_2012_8				
Comment Code					
T5 : Tree stumps.					
Inspector Comment					
Several tree stumps on waterside shoulder.					

No Photos

LM Start	1.66	Rating **	M	Issue No.	240
LM End	1.66	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.927159 °	37.927159 °
				-121.327022 °	-121.327022 °
DWR ID	DWR_RD0524_01_f_2017_240				
Comment Code					
TR : Tree or limb					
Inspector Comment					

Photo 1 of 1 : FA_2018_RD0524_107_240_20180906_00335.jpg



Looking southeast at the landside slope.

*** Location**

LS : Land Side N/A : Not Applicable
WS : Water Side
CR : Crown

**** Rating**

A : Acceptable N : Not Inspected/Rated
M : Minimally Acceptable C : Corrected
U : Unacceptable A/W : Acceptable but Monitor & Maintain

+ Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

Reclamation District No. 0524 Middle Roberts Island

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	1.67	Rating **	C	Issue No.	241
LM End	1.67	Issue Type +	En	Location *	CR
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.926990 °	37.926990 °
				-121.326811 °	-121.326811 °
DWR ID	DWR_RD0524_01_f_2017_241				
Comment Code					
EQ : Equipment					
Inspector Comment					
Landowner has stored a jetski on the crown.					

No Photos

LM Start	1.68	Rating **	M	Issue No.	242
LM End	1.68	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.926917 °	37.926917 °
				-121.326728 °	-121.326728 °
DWR ID	DWR_RD0524_01_f_2017_242				
Comment Code					
TR : Tree or limb					
Inspector Comment					

No Photos

LM Start	1.69	Rating **	M	Issue No.	27
LM End	1.70	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			37.926728 °	37.926730 °
				-121.326597 °	-121.326508 °
DWR ID	DWR_RD0524_01_s_2012_27				
Comment Code					
S1 : Repair slope instability.					
Inspector Comment					
Slope damage several feet long and greater than one inch deep.					

Photo 1 of 1 : FA_2018_RD0524_107_27_20180906_00048.jpg



Looking south at landward slope depression.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	1.71	Rating **	U	Issue No.	243
LM End	1.72	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.926638 °	37.926471 °
				-121.326374 °	-121.326175 °
DWR ID	DWR_RD0524_01_f_2017_243				
Comment Code					
V2 : Remove the wild growth other than native grasses from the levee slopes.					
Inspector Comment					

Photo 1 of 1 : FA_2018_RD0524_107_243_20180906_00337.jpg



Looking southeast at the waterside slope.

LM Start	1.73	Rating **	U	Issue No.	244
LM End	1.75	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.926395 °	37.926191 °
				-121.326125 °	-121.325952 °
DWR ID	DWR_RD0524_01_f_2017_244				
Comment Code					
V2 : Remove the wild growth other than native grasses from the levee slopes.					
Inspector Comment					

Photo 1 of 1 : FA_2018_RD0524_107_244_20180906_00338.jpg



Looking southeast at the waterside slope.

LM Start	1.73	Rating **	U	Issue No.	28
LM End	1.73	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.926322 °	37.926322 °
				-121.326115 °	-121.326115 °
DWR ID	DWR_RD0524_01_s_2012_28				
Comment Code					
GA : Garbage					
Inspector Comment					
Large pruning piles on landside slope.					

Photo 1 of 1 : FA_2018_RD0524_107_28_20180906_00049.jpg



Looking west at pruning and garbage piles at landward berm.

*** Location**

LS : Land Side N/A : Not Applicable
WS : Water Side
CR : Crown

**** Rating**

A : Acceptable N : Not Inspected/Rated
M : Minimally Acceptable C : Corrected
U : Unacceptable A/W : Acceptable but Monitor & Maintain

+ Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	1.73	Rating **	U	Issue No.	245
LM End	1.75	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.926312 °	37.926093 °
				-121.326065 °	-121.325864 °
DWR ID	DWR_RD0524_01_f_2017_245				
Comment Code					
V2 : Remove the wild growth other than native grasses from the levee slopes.					
Inspector Comment					

Photo 1 of 1 : FA_2018_RD0524_107_245_20180906_00339.jpg



Looking southeast at the landside slope.

LM Start	1.76	Rating **	U	Issue No.	46
LM End	1.81	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.925993 °	37.925397 °
				-121.325777 °	-121.325308 °
DWR ID	DWR_RD0524_01_s_2012_46				
Comment Code					
EQ : Equipment					
Inspector Comment					
Irrigation pipes stored at landward toe.					

Photo 1 of 1 : FA_2018_RD0524_107_46_20180919_00474.jpg

Looking southwest at irrigation pipes stored at landward slope and toe.
(Fall 2018)

* Location
LS : Land Side N/A : Not Applicable
WS : Water Side
CR : Crown

** Rating
A : Acceptable N : Not Inspected/Rated
M : Minimally Acceptable C : Corrected
U : Unacceptable A/W : Acceptable but Monitor & Maintain

+ Issue Type
Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	1.80	Rating **	M	Issue No.	942
LM End	1.80	Issue Type +	En	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			37.925480 °	37.925480 °
				-121.325358 °	-121.325358 °
DWR ID	24032				
Comment Code					
Inspector Comment					
FS_ID:21866 DS_ID:24032 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: No permit identified for crossing. FIELD_STRUCT_DESC: 12-inch wrapped steel irrigation pipe through the levee, at an unknown depth. Pump, butterfly valves, vent, and siphon breaker at concrete pad 50 feet off the landside (LS) toe. Siphon breaker in 14-inch concrete standpipe on the LS shoulder. FS Date: 8/20/2013					

Photo 1 of 3 : UCIP_FA_2018_21866_37124.jpg



Pipe visible at lower left.

LM Start	1.80	Rating **	M	Issue No.	942 (cont)
LM End	1.80	Issue Type +	En	Location *	

Photo 2 of 3 : UCIP_FA_2018_21866_37123.jpg



Pumping plant off LS toe.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	1.80	Rating **	M	Issue No.	942 (cont)					
LM End	1.80	Issue Type +	En	Location *						
Category	Supplemental		GPS Latitude/Longitude							
			Start	End						
Item	DWR UCIP Field Study		37.925480°	37.925480°						
			-121.325358°	-121.325358°						
DWR ID	24032									
Comment Code										
Inspector Comment										
FS_ID:21866 DS_ID:24032 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: No permit identified for crossing. FIELD_STRUCT_DESC: 12-inch wrapped steel irrigation pipe through the levee, at an unknown depth. Pump, butterfly valves, vent, and siphon breaker at concrete pad 50 feet off the landside (LS) toe. Siphon breaker in 14-inch concrete standpipe on the LS shoulder. FS Date: 8/20/2013										

Photo 3 of 3 : UCIP_FA_2018_21866_37122.jpg



Pumping plant with siphon breaker, vents, and butterfly valves.

LM Start	1.81	Rating **	M	Issue No.	943					
LM End	1.81	Issue Type +	En	Location *						
Category	Supplemental		GPS Latitude/Longitude							
			Start	End						
Item	DWR UCIP Field Study		37.925429°	37.925429°						
			-121.325323°	-121.325323°						
DWR ID	20609									
Comment Code										
Inspector Comment										
FS_ID:17847 DS_ID:20609 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: Pipe appears abandoned and if so should be done so properly. FIELD_STRUCT_DESC: 14-inch irrigation pipe of an unknown material through the levee, 20 feet below the crown. 2 pumps and gate valves discharge into surge tank in pump house on the waterside (WS) slope. Concrete distribution box removed from the WS slope. Abandoned 36-inch diameter concrete standpipe on the landside (LS) toe next to service pole. [Additional Reference(s): DWR Levee Log, 2004. USACE San Joaquin O&M Manual 7, April 1964, (HLM 1.83)]. FS Date: 8/20/2013										

Photo 1 of 3 : UCIP_FA_2018_17847_29962.jpg



Pipes and pumphouse on WS slope.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable N : Not Inspected/Rated M : Minimally Acceptable C : Corrected U : Unacceptable A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

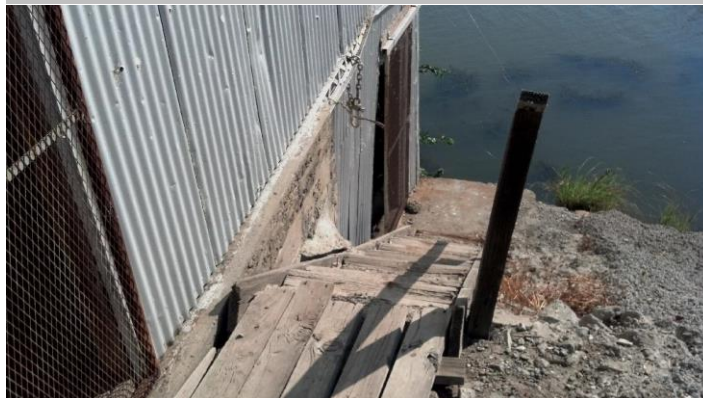
Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	1.81	Rating **	M	Issue No.	943 (cont)	
LM End	1.81	Issue Type +	En	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start		End
Item	DWR UCIP Field Study			37.925429 °		37.925429 °
				-121.325323 °		-121.325323 °
DWR ID	20609					
Comment Code						
Inspector Comment						
FS_ID:17847						
DS_ID:20609						
EP_NO: N/A						
Repair Type: Non-Urgent						
Crossing Status: Found						
UCIP Comments: Pipe appears abandoned and if so should be done so properly.						
FIELD_STRUCT_DESC: 14-inch irrigation pipe of an unknown material through the levee, 20 feet below the crown. 2 pumps and gate valves discharge into surge tank in pump house on the waterside (WS) slope. Concrete distribution box removed from the WS slope. Abandoned 36-inch diameter concrete standpipe on the landside (LS) toe next to service pole. [Additional Reference(s): DWR Levee Log, 2004. USACE San Joaquin O&M Manual 7, April 1964, (HLM 1.83)].						
FS Date: 8/20/2013						

LM Start	1.81	Rating **	M	Issue No.	943 (cont)
LM End	1.81	Issue Type +	En	Location *	

Photo 2 of 3 : UCIP_FA_2018_17847_29961.jpg



Steps to pump on WS slope.

Photo 3 of 3 : UCIP_FA_2018_17847_29960.jpg



Pipes at connection to concrete surge box on WS inside pumphouse.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	1.81	Rating **	M	Issue No.	944	
LM End	1.81	Issue Type +	En	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR UCIP Field Study			37.925431 °	37.925431 °	
				-121.325310 °	-121.325310 °	
DWR ID	24033					
Comment Code						
Inspector Comment						
FS_ID:21865 DS_ID:24033 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: Pipes appear abandoned and should be removed from levee. FIELD_STRUCT_DESC: *ABANDONED* One 1-inch and two 0.75-inch polyvinyl chloride conduits of an unknown purpose through the levee, 6 inches below the crown. FS Date: 8/20/2013						

Photo 1 of 2 : UCIP_FA_2018_21865_37121.jpg



Pipes visible on WS shoulder directly in front of pumphouse.

LM Start	1.81	Rating **	M	Issue No.	944 (cont)
LM End	1.81	Issue Type +	En	Location *	

Photo 2 of 2 : UCIP_FA_2018_21865_37120.jpg



Pipes visible on LS slope.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	1.90	Rating **	U	Issue No.	78
LM End	1.94	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.924364 °	37.923805 °
				-121.324473 °	-121.324238 °
DWR ID	DWR_RD0524_01_s_2012_78				
Comment Code					
V6 : Landscaping					
Inspector Comment					

Photo 1 of 1 : FA_2018_RD0524_107_78_20180906_00135.jpg



Looking southwest at landscaping on landside slope. (Spring 2012)

LM Start	1.94	Rating **	M	Issue No.	159
LM End	1.95	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			37.923703 °	37.923645 °
				-121.324238 °	-121.324233 °
DWR ID	DWR_RD0524_01_s_2017_159				
Comment Code					
S1 : Repair slope instability.					
Inspector Comment					
Minor sloughing and cracking.					

Photo 1 of 1 : FA_2018_RD0524_107_159_20180906_00212.jpg



Looking at minor cracking and sloughing on waterward slope.

LM Start	1.94	Rating **	M	Issue No.	246
LM End	1.94	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.923692 °	37.923692 °
				-121.324225 °	-121.324225 °
DWR ID	DWR_RD0524_01_f_2017_246				
Comment Code					
T1 : Trim trees to at least five feet above ground level.					
Inspector Comment					

No Photos

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	1.94	Rating **	U	Issue No.	176
LM End	1.94	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			37.923688 °	37.923688 °
				-121.324223 °	-121.324223 °
DWR ID	DWR_RD0524_01_s_2015_176				
Comment Code					
E2 : Schedule repair of erosion site prior to the next inspection.					
Inspector Comment					
Landside caving (3 x 18" x 5) caused by broken sprinklers.					

Photo 1 of 2 : FA_2018_RD0524_107_176_20180906_00231.jpg



Looking west at erosion within landscaping on landward shoulder and slope.

LM Start	1.94	Rating **	U	Issue No.	176 (cont)
LM End	1.94	Issue Type +	Ma	Location *	LS

Photo 2 of 2 : FA_2018_RD0524_107_176_20180906_00232.jpg



Looking east at erosion within landscaping on landward slope and shoulder.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	1.99	Rating **	M	Issue No.	945
LM End	1.99	Issue Type +	En	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			37.923022°	37.923022°
				-121.323953°	-121.323953°
DWR ID	24035				
Comment Code					
Inspector Comment					
FS_ID:21872 DS_ID:24035 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: No permit identified for this crossing. FIELD_STRUCT_DESC: 3-inch polyvinyl chloride domestic non-potable water line through the levee, at an unknown depth. Pump on concrete pad at the waterside (WS) toe. FS Date: 8/20/2013					

LM Start	1.99	Rating **	M	Issue No.	945 (cont)
LM End	1.99	Issue Type +	En	Location *	

Photo 1 of 3 : UCIP_FA_2018_21872_37128.jpg



Pump on concrete pad at WS slope.

Photo 2 of 3 : UCIP_FA_2018_21872_37127.jpg



PVC pipe visible on LS toe.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	1.99	Rating **	M	Issue No.	945 (cont)	
LM End	1.99	Issue Type +	En	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR UCIP Field Study			37.923022 °	37.923022 °	
				-121.323953 °	-121.323953 °	
DWR ID	24035					
Comment Code						
Inspector Comment						
FS_ID:21872						
DS_ID:24035						
EP_NO: N/A						
Repair Type: Non-Urgent						
Crossing Status: Found						
UCIP Comments: No permit identified for this crossing.						
FIELD_STRUCT_DESC: 3-inch polyvinyl chloride domestic non-potable						
water line through the levee, at an unknown depth. Pump on concrete						
pad at the waterside (WS) toe.						
FS Date: 8/20/2013						

Photo 3 of 3 : UCIP_FA_2018_21872_37126.jpg



Pump and pipe visible on WS slope.

LM Start	1.99	Rating **	M	Issue No.	105
LM End	1.99	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.923032 °	37.923032 °
				-121.323933 °	-121.323933 °
DWR ID	DWR_RD0524_01_s_2012_105				
Comment Code					
T1 : Trim trees to at least five feet above ground level.					
Inspector Comment					

No Photos

* Location
 LS : Land Side N/A : Not Applicable
 WS : Water Side
 CR : Crown

** Rating
 A : Acceptable N : Not Inspected/Rated
 M : Minimally Acceptable C : Corrected
 U : Unacceptable A/W : Acceptable but Monitor & Maintain

+ Issue Type
 Ma : Maintenance Deficiency
 Ob : Design & System Obsolescence
 En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

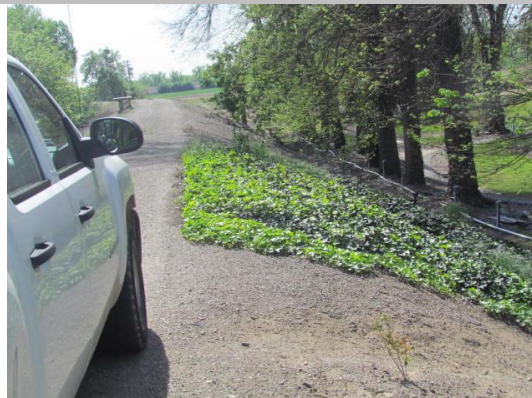
Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	2.00	Rating **	U	Issue No.	106
LM End	2.00	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.922923 °	37.922923 °
				-121.323837 °	-121.323837 °
DWR ID	DWR_RD0524_01_s_2012_106				
Comment Code					
V6 : Landscaping					
Inspector Comment					

Photo 1 of 1 : FA_2018_RD0524_107_106_20180906_00168.jpg



Looking southwest at ground cover on landward slope.

LM Start	2.01	Rating **	M	Issue No.	182
LM End	2.04	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.922837 °	37.922514 °
				-121.323785 °	-121.323504 °
DWR ID	DWR_RD0524_01_s_2014_182				
Comment Code					
DT : Ditch					
Inspector Comment					
Old irrigation ditch at the landside toe should be removed.					

Photo 1 of 2 : FA_2018_RD0524_107_182_20180906_00240.jpg



Looking northwest at an old irrigation ditch at landward toe.

LM Start	2.01	Rating **	M	Issue No.	182 (cont)
LM End	2.04	Issue Type +	En	Location *	LS

Photo 2 of 2 : FA_2018_RD0524_107_182_20180906_00241.jpg



Looking southwest at an old irrigation ditch at landward toe.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable		N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	2.03	Rating **	M	Issue No.	946	
LM End	2.03	Issue Type +	En	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR UCIP Field Study			37.922535 °	37.922535 °	
				-121.323568 °	-121.323568 °	
DWR ID	24036					
Comment Code						
Inspector Comment						
FS_ID:21883 DS_ID:24036 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: Pipe abandoned and should be done so properly. Holes visible throughout exposed pipe. FIELD_STRUCT_DESC: 5-inch wrapped steel irrigation pipe through the levee, 6 feet below the crown. No pump or other appurtenances found. FS Date: 8/20/2013						

Photo 1 of 2 : UCIP_FA_2018_21883_37134.jpg



Pipe visible on WS slope.

LM Start	2.03	Rating **	M	Issue No.	946 (cont)
LM End	2.03	Issue Type +	En	Location *	

Photo 2 of 2 : UCIP_FA_2018_21883_37133.jpg



Holes in pipe along exposed side of pipe at WS slope.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	2.07	Rating **	M	Issue No.	947
LM End	2.07	Issue Type +	En	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			37.922080°	37.922080°
				-121.323118°	-121.323118°
DWR ID	24038				
Comment Code					
Inspector Comment					
FS_ID:21895 DS_ID:24038 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: No permit identified for this crossing. FIELD_STRUCT_DESC: 6-inch steel irrigation pipe through the levee, at an unknown depth. Vent, meter, butterfly valve, and pump at pump house on the waterside (WS) slope. FS Date: 8/20/2013					

LM Start	2.07	Rating **	M	Issue No.	947 (cont)
LM End	2.07	Issue Type +	En	Location *	

Photo 1 of 3 : UCIP_FA_2018_21895_37142.jpg



Steel irrigation line visible in front of tank to right of powerpole off LS toe.

Photo 2 of 3 : UCIP_FA_2018_21895_37141.jpg



Irrigation line visible on side of pumphouse.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	2.07	Rating **	M	Issue No.	947 (cont)	
LM End	2.07	Issue Type +	En	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR UCIP Field Study			37.922080 °	37.922080 °	
				-121.323118 °	-121.323118 °	
DWR ID	24038					
Comment Code						
Inspector Comment						
FS_ID:21895 DS_ID:24038 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: No permit identified for this crossing. FIELD_STRUCT_DESC: 6-inch steel irrigation pipe through the levee, at an unknown depth. Vent, meter, butterfly valve, and pump at pump house on the waterside (WS) slope. FS Date: 8/20/2013						

Photo 3 of 3 : UCIP_FA_2018_21895_37140.jpg



Pump and butterfly valve inside pumphouse on WS berm.

LM Start	2.07	Rating **	M	Issue No.	948	
LM End	2.07	Issue Type +	En	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR UCIP Field Study			37.922064 °	37.922064 °	
				-121.323084 °	-121.323084 °	
DWR ID	20612					
Comment Code						
Inspector Comment						
FS_ID:17944						
DS_ID:20612						
EP_NO: N/A						
Repair Type: Non-Urgent						
Crossing Status: Found						
UCIP Comments: Soil excavated from cover over pipe on WS next to concrete riser. May indicate a leak or other problem.						
FIELD_STRUCT_DESC: 20-inch steel irrigation pipe through the levee, 15 feet below the crown. Pump in pump house on the waterside (WS) slope. Slide gate in 4-foot diameter concrete standpipe on the WS slope with secondary concrete standpipe. Polyvinyl chloride standpipe visible 350 feet off the landside (LS) toe. [Additional Reference(s): DWR Levee Log, 2004. USACE San Joaquin O&M Manual 7, April 1964, (HLM 2.10)].						
FS Date: 8/20/2013						

Photo 1 of 3 : UCIP_FA_2018_17944_30045.jpg



Slide gate in concrete riser with secondary concrete riser in foreground. Pump house in background.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	2.07	Rating **	M	Issue No.	948 (cont)
LM End	2.07	Issue Type +	En	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			37.922064 °	37.922064 °
				-121.323084 °	-121.323084 °
DWR ID	20612				

Comment Code

Inspector Comment

FS_ID:17944
DS_ID:20612
EP_NO: N/A
Repair Type: Non-Urgent
Crossing Status: Found
UCIP Comments: Soil excavated from cover over pipe on WS next to concrete riser. May indicate a leak or other problem.
FIELD_STRUCT_DESC: 20-inch steel irrigation pipe through the levee, 15 feet below the crown. Pump in pump house on the waterside (WS) slope. Slide gate in 4-foot diameter concrete standpipe on the WS slope with secondary concrete standpipe. Polyvinyl chloride standpipe visible 350 feet off the landside (LS) toe. [Additional Reference(s): DWR Levee Log, 2004. USACE San Joaquin O&M Manual 7, April 1964, (HLM 2.10)].
FS Date: 8/20/2013

LM Start	2.07	Rating **	M	Issue No.	948 (cont)
LM End	2.07	Issue Type +	En	Location *	

Photo 2 of 3 : UCIP_FA_2018_17944_30044.jpg



Pump and pipe inside pumphouse.

Photo 3 of 3 : UCIP_FA_2018_17944_30043.jpg



Hole over pipe next to 4-foot diameter concrete standpipe on WS slope.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	2.12	Rating **	M	Issue No.	247
LM End	2.12	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.921664 °	37.921664 °
				-121.322499 °	-121.322499 °
DWR ID	DWR_RD0524_01_f_2017_247				
Comment Code					
ST : Stairway					
Inspector Comment					
Landowner installed rubber tires for a stairway on landside slope.					

No Photos

LM Start	2.25	Rating **	C	Issue No.	31
LM End	2.25	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			37.920493 °	37.920493 °
				-121.320565 °	-121.320565 °
DWR ID	DWR_RD0524_01_s_2012_31				
Comment Code					
S1 : Repair slope instability.					
Inspector Comment					
Slope instability probably cause by leak in irrigation pipe. Pipe should be inspected internally.					

No Photos

LM Start	2.27	Rating **	U	Issue No.	32
LM End	2.29	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.920372 °	37.920167 °
				-121.320230 °	-121.319890 °
DWR ID	DWR_RD0524_01_s_2012_32				
Comment Code					
V4 : Elderberries are blocking visibility and flood fight capability.					
Inspector Comment					
Dense elderberry bushes on landside slope and toe.					

No Photos

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	2.27	Rating **	U	Issue No.	203
LM End	2.27	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.920327 °	37.920327 °
				-121.320175 °	-121.320175 °
DWR ID	DWR_RD0524_01_f_2016_203				
Comment Code					
PR : Prunings					
Inspector Comment					
Large pruning pile on landside slope and toe.					

Photo 1 of 1 : FA_2018_RD0524_107_203_20180906_00269.jpg



Looking west at pruning pile on waterward slope.

LM Start	2.30	Rating **	M	Issue No.	70
LM End	2.30	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR Erosion Survey			37.920150 °	37.920150 °
				-121.319700 °	-121.319700 °
DWR ID	RD0524U01RM42.9				
Comment Code					
Inspector Comment					
09/13/2017: The erosion is located immediately upstream of a repaired levee section. [2017 Site ID:RD0524U01RM42.9]					

Photo 1 of 3 : FA_2018_RD0524_107_70_20180906_00120.jpg



Front view of the pocket erosion.

LM Start	2.30	Rating **	M	Issue No.	70 (cont)
LM End	2.30	Issue Type +	Ma	Location *	WS

Photo 2 of 3 : FA_2018_RD0524_107_70_20180906_00121.jpg



Close view of the erosion.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable		N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	2.30	Rating **	M	Issue No.	70 (cont)	
LM End	2.30	Issue Type +	Ma	Location *	WS	
Category	Supplemental			GPS Latitude/Longitude		
				Start		End
Item	DWR Erosion Survey			37.920150 °	37.920150 °	
				-121.319700 °	-121.319700 °	
DWR ID	RD0524U01RM42.9					
Comment Code						
Inspector Comment						
09/13/2017: The erosion is located immediately upstream of a repaired levee section. [2017 Site ID:RD0524U01RM42.9]						

Photo 3 of 3 : FA_2018_RD0524_107_70_20180906_00122.jpg



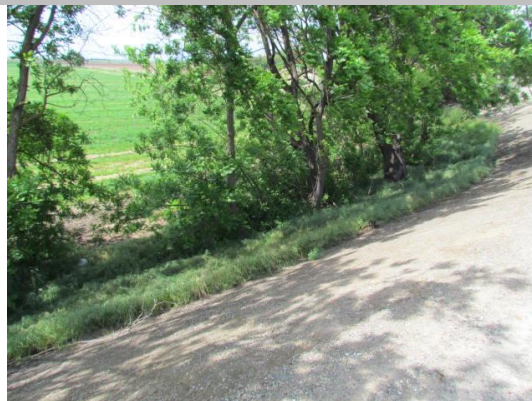
Front view of the erosion.

LM Start	2.32	Rating **	C	Issue No.	34
LM End	2.33	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			37.919885 °	37.919703 °
				-121.319713 °	-121.319702 °
DWR ID	DWR_RD0524_01_s_2012_34				
Comment Code					
S2 : Repair the levee slope damaged by foot traffic and prevent access where possible.					
Inspector Comment					
Slope damage caused by walking traffic and using bank as a fishing platform.					

No Photos

LM Start	2.33	Rating **	M	Issue No.	107
LM End	2.33	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.919742 °	37.919742 °
				-121.319623 °	-121.319623 °
DWR ID	DWR_RD0524_01_s_2012_107				
Comment Code					
T1 : Trim trees to at least five feet above ground level.					
Inspector Comment					

Photo 1 of 1 : FA_2018_RD0524_107_107_20180906_00169.jpg



Looking northwest at untrimmed trees at landward toe.

*** Location**

LS : Land Side N/A : Not Applicable
WS : Water Side
CR : Crown

**** Rating**

A : Acceptable N : Not Inspected/Rated
M : Minimally Acceptable C : Corrected
U : Unacceptable A/W : Acceptable but Monitor & Maintain

+ Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	2.38	Rating **	M	Issue No.	184
LM End	2.38	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.919036°	37.919036°
				-121.319969°	-121.319969°
DWR ID	DWR_RD0524_01_s_2014_184				
Comment Code					
T1 : Trim trees to at least five feet above ground level.					
Inspector Comment					

No Photos

LM Start	2.41	Rating **	U	Issue No.	35
LM End	2.45	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.918785 °	37.918515 °
				-121.320417 °	-121.321110 °
DWR ID	DWR_RD0524_01_s_2012_35				
Comment Code					
V4 : Elderberries are blocking visibility and flood fight capability.					
Inspector Comment					

No Photos

LM Start	2.44	Rating **	C	Issue No.	36
LM End	2.47	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			37.918628 °	37.918438 °
				-121.320817 °	-121.321452 °
DWR ID	DWR_RD0524_01_s_2012_36				
Comment Code					
E1 : Note and monitor erosion site.					
Inspector Comment					

No Photos

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	2.45	Rating **	U	Issue No.	80
LM End	2.45	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.918480 °	37.918480 °
				-121.321114 °	-121.321114 °
DWR ID	DWR_RD0524_01_s_2012_80				
Comment Code					
T1 : Trim trees to at least five feet above ground level.					
Inspector Comment					
Untrimmed tree on landside slope.					

Photo 1 of 1 : FA_2018_RD0524_107_80_20180906_00140.jpg



Looking south at untrimmed tree on landward slope.

LM Start	2.47	Rating **	C	Issue No.	160
LM End	2.48	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			37.918403 °	37.918383 °
				-121.321442 °	-121.321497 °
DWR ID	DWR_RD0524_01_s_2017_160				
Comment Code					
E1 : Note and monitor erosion site.					
Inspector Comment					
Runoff erosion on landside slope					

No Photos

LM Start	2.47	Rating **	M	Issue No.	249
LM End	2.47	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.918386 °	37.918386 °
				-121.321444 °	-121.321444 °
DWR ID	DWR_RD0524_01_f_2017_249				
Comment Code					
V4 : Elderberries are blocking visibility and flood fight capability.					
Inspector Comment					

No Photos

* Location
LS : Land Side N/A : Not Applicable
WS : Water Side
CR : Crown

** Rating
A : Acceptable N : Not Inspected/Rated
M : Minimally Acceptable C : Corrected
U : Unacceptable A/W : Acceptable but Monitor & Maintain

+ Issue Type
Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	2.49	Rating **	U	Issue No.	37
LM End	2.50	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.918345 °	37.918302 °
				-121.321765 °	-121.321923 °
DWR ID	DWR_RD0524_01_s_2012_37				
Comment Code					
V4 : Elderberries are blocking visibility and flood fight capability.					
Inspector Comment					

No Photos

LM Start	2.50	Rating **	U	Issue No.	38
LM End	2.50	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.918287 °	37.918287 °
				-121.321980 °	-121.321980 °
DWR ID	DWR_RD0524_01_s_2012_38				
Comment Code					
V4 : Elderberries are blocking visibility and flood fight capability.					
Inspector Comment					

No Photos

LM Start	2.53	Rating **	U	Issue No.	40
LM End	2.57	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.918047 °	37.917498 °
				-121.322415 °	-121.322797 °
DWR ID	DWR_RD0524_01_s_2012_40				
Comment Code					
V4 : Elderberries are blocking visibility and flood fight capability.					
Inspector Comment					

No Photos

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	2.54	Rating **	C	Issue No.	82
LM End	2.54	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			37.917978 °	37.917978 °
				-121.322483 °	-121.322483 °
DWR ID	DWR_RD0524_01_s_2012_82				
Comment Code					
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.					
Inspector Comment					
Landside slope damage from animal digging into levee.					

No Photos

LM Start	2.56	Rating **	U	Issue No.	42
LM End	2.56	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.917673 °	37.917673 °
				-121.322718 °	-121.322718 °
DWR ID	DWR_RD0524_01_s_2012_42				
Comment Code					
BU : Building					
Inspector Comment					
Animal pens on landside slope and toe.					

Photo 1 of 2 : FA_2018_RD0524_107_42_20180906_00070.jpg



Looking west at animal pens on landside toe. (Fall 2012)

LM Start	2.56	Rating **	U	Issue No.	42 (cont)
LM End	2.56	Issue Type +	En	Location *	LS

Photo 2 of 2 : FA_2018_RD0524_107_42_20180906_00071.jpg



Looking at animal pens on landside slope and toe.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	2.57	Rating **	M	Issue No.	12
LM End	2.57	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.917538 °	37.917538 °
				-121.322757 °	-121.322757 °
DWR ID	DWR_RD0524_01_f_2012_12				
Comment Code					
PO : Pole					
Inspector Comment					
Old fence poles on landside shoulder and slope should be removed. 4/3/17: Old post removed, a new larger post replacing the old post					

Photo 1 of 1 : FA_2018_RD0524_107_12_20180906_00018.jpg



Looking northwest at fence poles on landside shoulder.

LM Start	2.57	Rating **	C	Issue No.	218
LM End	2.57	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			37.917492 °	37.917492 °
				-121.322795 °	-121.322795 °
DWR ID	DWR_RD0524_01_f_2016_218				
Comment Code					
E2 : Schedule repair of erosion site prior to the next inspection.					
Inspector Comment					
Large trench on waterside shoulder and slope. Trench is 45 x 15 x 5.					

No Photos

LM Start	2.58	Rating **	M	Issue No.	7
LM End	2.58	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.917431 °	37.917431 °
				-121.322780 °	-121.322780 °
DWR ID	DWR_RD0524_01_f_2012_7				
Comment Code					
RA : Ramp					
Inspector Comment					
Ramp due to land owner traffic.					

Photo 1 of 1 : FA_2018_RD0524_107_7_20180906_00015.jpg



Looking southeast at unauthorized ramp on waterside slope.

* Location
LS : Land Side N/A : Not Applicable
WS : Water Side
CR : Crown

** Rating
A : Acceptable N : Not Inspected/Rated
M : Minimally Acceptable C : Corrected
U : Unacceptable A/W : Acceptable but Monitor & Maintain

+ Issue Type
Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	2.58	Rating **	M	Issue No.	949
LM End	2.58	Issue Type +	En	Location *	
Category	Supplemental		GPS Latitude/Longitude		
			Start	End	
Item	DWR UCIP Field Study		37.917365°	37.917365°	
			-121.322779°	-121.322779°	
DWR ID	24040				

Comment Code

Inspector Comment

FS_ID:21935
DS_ID:24040
EP_NO: N/A
Repair Type: Non-Urgent
Crossing Status: Found
UCIP Comments: Need to determine type of abandonment for pipe at this location.
FIELD_STRUCT_DESC: *ABANDONED* Pump pad on the landside (LS) shoulder with 4-foot by 9-foot brick distribution box on the waterside (WS) slope. No pipe visible. 4-foot by 9-foot brick distribution box on the LS toe.
FS Date: 8/20/2013

LM Start	2.58	Rating **	M	Issue No.	949 (cont)
LM End	2.58	Issue Type +	En	Location *	

Photo 1 of 3 : UCIP_FA_2018_21935_37162.jpg



Foundation for pump with distribution box on WS shoulder.

Photo 2 of 3 : UCIP_FA_2018_21935_37161.jpg



Distribution box on LS toe.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	2.58	Rating **	M	Issue No.	949 (cont)	
LM End	2.58	Issue Type +	En	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR UCIP Field Study			37.917365 °	37.917365 °	
				-121.322779 °	-121.322779 °	
DWR ID	24040					
Comment Code						
Inspector Comment						
FS_ID:21935						
DS_ID:24040						
EP_NO: N/A						
Repair Type: Non-Urgent						
Crossing Status: Found						
UCIP Comments: Need to determine type of abandonment for pipe at this location.						
FIELD_STRUCT_DESC: *ABANDONED* Pump pad on the landside (LS) shoulder with 4-foot by 9-foot brick distribution box on the waterside (WS) slope. No pipe visible. 4-foot by 9-foot brick distribution box on the LS toe.						
FS Date: 8/20/2013						

Photo 3 of 3 : UCIP_FA_2018_21935_37160.jpg



Distribution box on LS toe.

LM Start	2.60	Rating **	U	Issue No.	185
LM End	2.64	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.917152°	37.916807°
				-121.322582°	-121.322069°
DWR ID	DWR_RD0524_01_s_2014_185				
Comment Code					
T2 : Thin trees to allow visibility of the ground and room to flood fight.					
Inspector Comment					

Photo 1 of 1 : FA_2018_RD0524_107_185_20180906_00245.jpg



Looking northwest at untrimmed trees on landward slope and toe.

*** Location**

LS : Land Side N/A : Not Applicable
 WS : Water Side
 CR : Crown

**** Rating**

A : Acceptable N : Not Inspected/Rated
 M : Minimally Acceptable C : Corrected
 U : Unacceptable A/W : Acceptable but Monitor & Maintain

+ Issue Type

Ma : Maintenance Deficiency
 Ob : Design & System Obsolescence
 En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	2.64	Rating **	U	Issue No.	43
LM End	2.64	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.916780 °	37.916780 °
				-121.322095 °	-121.322095 °
DWR ID	DWR_RD0524_01_s_2012_43				
Comment Code					
V4 : Elderberries are blocking visibility and flood fight capability.					
Inspector Comment					
Dense elderberry on landside shoulder, slope, and toe.					

No Photos

LM Start	2.65	Rating **	U	Issue No.	918
LM End	2.66	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.916718 °	37.916502 °
				-121.322020 °	-121.321980 °
DWR ID	DWR_RD0524_01_s_2012_918				
Comment Code					
T1 : Trim trees to at least five feet above ground level.					
Inspector Comment					
Untrimmed trees on landside slope and toe.					

Photo 1 of 1 : FA_2018_RD0524_107_918_20180906_00361.jpg



Looking south at untrimmed trees on landward slope.

LM Start	2.65	Rating **	U	Issue No.	920
LM End	2.65	Issue Type +	En	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.916698 °	37.916698 °
				-121.322007 °	-121.322007 °
DWR ID	DWR_RD0524_01_s_2012_920				
Comment Code					
RA : Ramp					
Inspector Comment					
Hole dug at base of ramp on river side.					

Photo 1 of 2 : FA_2018_RD0524_107_920_20180906_00362.jpg



Looking east at hole at the end of ramp on waterward slope.

*** Location**

LS : Land Side N/A : Not Applicable
WS : Water Side
CR : Crown

**** Rating**

A : Acceptable N : Not Inspected/Rated
M : Minimally Acceptable C : Corrected
U : Unacceptable A/W : Acceptable but Monitor & Maintain


+ Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

Levee Inspection Report By Mile - Fall 2018

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

Photo 2 of 2 : FA_2018_RD0524_107_920_20180906_00363.jpg



Looking southeast at unauthorized ramp on waterside slope. (Spring 2016)

No Photos

Photo 1 of 2 : FA_2018_RD0524_107_264_20180906_00352.jpg



Looking south at untrimmed trees on landward slope.

* Location	** Rating	+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable N : Not Inspected/Rated M : Minimally Acceptable C : Corrected U : Unacceptable A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	2.70	Rating **	M	Issue No.	264 (cont)	
LM End	2.76	Issue Type +	Ma	Location *	LS	
Category	Earthen Levee			GPS Latitude/Longitude		
				Start		End
Item	Trim / Thin Trees			37.915945°	37.915276°	
				-121.322290°	-121.322808°	
DWR ID	DWR_RD0524_01_s_2012_264					
Comment Code						
T2 : Thin trees to allow visibility of the ground and room to flood fight.						
Inspector Comment						
Untrimmed trees along landside slope and toe. Additionally, trim over hanging trees at least 12 feet above ground level.						

Photo 2 of 2 : FA_2018_RD0524_107_264_20180906_00353.jpg



Looking north at dense trees overhanging levee crown.

LM Start	2.73	Rating **	M	Issue No.	950
LM End	2.73	Issue Type +	En	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			37.915698 °	37.915698 °
				-121.322501 °	-121.322501 °
DWR ID	20616				
Comment Code					
Inspector Comment					
FS_ID:18085 DS_ID:20616 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: No permit identified for crossing. Unknownw use. Pipe should be removed. FIELD_STRUCT_DESC: 3-inch galvanized iron pipe of an unknown purpose through the levee, 0.3 feet below the crown. Valve on the landside (LS) shoulder. [Additional Reference(s): DWR Levee Log, 2004]. FS Date: 8/20/2013 3:28:19 PM					

Photo 1 of 2 : UCIP_FA_2018_18085_30191.jpg



Pipe and vent visible on LS slope.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	2.73	Rating **	M	Issue No.	950 (cont)	
LM End	2.73	Issue Type +	En	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR UCIP Field Study			37.915698 °	37.915698 °	
				-121.322501 °	-121.322501 °	
DWR ID	20616					
Comment Code						
Inspector Comment						
FS_ID:18085						
DS_ID:20616						
EP_NO: N/A						
Repair Type: Non-Urgent						
Crossing Status: Found						
UCIP Comments: No permit identified for crossing. Unknoww use.						
Pipe should be removed.						
FIELD_STRUCT_DESC: 3-inch galvanized iron pipe of an unknown						
purpose through the levee, 0.3 feet below the crown. Valve on the						
lanside (LS) shoulder. [Additional Reference(s): DWR Levee Log,						
2004].						
FS Date: 8/20/2013 3:28:19 PM						

Photo 2 of 2 : UCIP_FA_2018_18085_30190.jpg



Pipe visible on WS slope.

LM Start	2.74	Rating **	C	Issue No.	41
LM End	2.74	Issue Type +	En	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.915556 °	37.915556 °
				-121.322616 °	-121.322616 °
DWR ID	DWR_RD0524_01_s_2016_41				
Comment Code					
EQ : Equipment					
Inspector Comment					
Landowner installed satellite dish on waterside shoulder.					

No Photos

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	2.75	Rating **	C	Issue No.	152
LM End	2.75	Issue Type +	Ma	Location *	CR
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.915427 °	37.915427 °
				-121.322691 °	-121.322691 °
DWR ID	DWR_RD0524_01_s_2018_152				
Comment Code					
TR : Tree or limb					
Inspector Comment					
Large tree branch across levee crown. Block access to levee.					

No Photos

LM Start	2.75	Rating **	M	Issue No.	146
LM End	2.75	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.915358 °	37.915358 °
				-121.322768 °	-121.322768 °
DWR ID	DWR_RD0524_01_f_2018_146				
Comment Code					
PR : Prunings					
Inspector Comment					

No Photos

LM Start	2.77	Rating **	U	Issue No.	219
LM End	2.80	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			37.915195 °	37.915052 °
				-121.322930 °	-121.323430 °
DWR ID	DWR_RD0524_01_f_2016_219				
Comment Code					
A1 : Exterminate rodents and backfill and compact or grout burrows.					
Inspector Comment					
Several large rodent holes on landside slope.					

Photo 1 of 2 : FA_2018_RD0524_107_219_20180906_00287.jpg



Looking south at several rodent holes on landward slope.

*** Location**

LS : Land Side N/A : Not Applicable
WS : Water Side
CR : Crown

**** Rating**

A : Acceptable N : Not Inspected/Rated
M : Minimally Acceptable C : Corrected
U : Unacceptable A/W : Acceptable but Monitor & Maintain

+ Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	2.77	Rating **	U	Issue No.	219 (cont)	
LM End	2.80	Issue Type +	Ma	Location *	LS	
Category	Earthen Levee			GPS Latitude/Longitude		
				Start		End
Item	Animal Control			37.915195 °		37.915052 °
				-121.322930 °		-121.323430 °
DWR ID	DWR_RD0524_01_f_2016_219					
Comment Code						
A1 : Exterminate rodents and backfill and compact or grout burrows.						
Inspector Comment						
Several large rodent holes on landside slope.						

Photo 2 of 2 : FA_2018_RD0524_107_219_20180906_00288.jpg



Looking at typical rodent hole on waterward slope.

LM Start	2.80	Rating **	U	Issue No.	48
LM End	2.80	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.915022°	37.915022°
				-121.323443°	-121.323443°
DWR ID	DWR_RD0524_01_s_2012_48				
Comment Code					
V4 : Elderberries are blocking visibility and flood fight capability.					
Inspector Comment					

No Photos

LM Start	2.86	Rating **	U	Issue No.	49
LM End	2.86	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.914427 °	37.914427 °
				-121.324198 °	-121.324198 °
DWR ID	DWR_RD0524_01_s_2012_49				
Comment Code					
V4 : Elderberries are blocking visibility and flood fight capability.					
Inspector Comment					

No Photos

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable N : Not Inspected/Rated M : Minimally Acceptable C : Corrected U : Unacceptable A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	2.87	Rating **	U	Issue No.	209
LM End	2.87	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.914257 °	37.914257 °
				-121.324317 °	-121.324317 °
DWR ID	DWR_RD0524_01_s_2016_209				
Comment Code					
T1 : Trim trees to at least five feet above ground level.					
Inspector Comment					
Untrimmed walnut tree on landside slope and toe.					

Photo 1 of 1 : FA_2018_RD0524_107_209_20180906_00275.jpg



Looking northwest at untrimmed tree at landward toe.

LM Start	2.90	Rating **	U	Issue No.	50
LM End	2.92	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.913767 °	37.913486 °
				-121.324427 °	-121.324428 °
DWR ID	DWR_RD0524_01_s_2012_50				
Comment Code					
PR : Prunings					
Inspector Comment					

Photo 1 of 1 : FA_2018_RD0524_107_50_20180906_00091.jpg



Looking southwest at prunings on landside slope.

LM Start	2.91	Rating **	U	Issue No.	161
LM End	2.91	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.913733 °	37.913733 °
				-121.324398 °	-121.324398 °
DWR ID	DWR_RD0524_01_s_2017_161				
Comment Code					
T5 : Tree stumps.					
Inspector Comment					

Photo 1 of 1 : FA_2018_RD0524_107_161_20180906_00214.jpg



Looking east at large tree stump on waterward shoulder.

*** Location**

LS : Land Side N/A : Not Applicable
WS : Water Side
CR : Crown

**** Rating**

A : Acceptable N : Not Inspected/Rated
M : Minimally Acceptable C : Corrected
U : Unacceptable A/W : Acceptable but Monitor & Maintain

+ Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

Levee Inspection Report By Mile - Fall 2018


Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

Photo 1 of 2 : FA_2018_RD0524_107_51_20180906_00092.jpg



Looking south at dense trees on landward slope fall 2015

Photo 2 of 2 : FA_2018_RD0524_107_51_20180906_00093.jpg



Looking south at dense trees on landward slope spring 2015

Photo 1 of 1 : FA_2018_RD0524_107_210_20180906_00276.jpg



Looking west at abandoned containers at landward toe.

* Location	** Rating	+ Issue Type
LS : Land Side N/A : Not Applicable	A : Acceptable N : Not Inspected/Rated	Ma : Maintenance Deficiency
WS : Water Side	M : Minimally Acceptable C : Corrected	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable A/W : Acceptable but Monitor & Maintain	En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	2.95	Rating **	M	Issue No.	951	
LM End	2.95	Issue Type +	En	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start		End
Item	DWR UCIP Field Study			37.913101 °	37.913101 °	
				-121.324500 °	-121.324500 °	
DWR ID	20617					
Comment Code						
Inspector Comment						
FS_ID:18089 DS_ID:20617 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Indicator Found UCIP Comments: Review crossing with inspector as records indicate that this should be an 8-inch pipe through levee 3.0 feet below crown, pump on landward side. Siphon breaker on the waterward slope. Originally included in the 1964 O&M manual. FIELD_STRUCT_DESC: 16-inch wrapped steel storm discharge pipe through the levee, 1.5 feet below the crown. Pump on steel pile structure at drainage canal off landside (LS) toe. [Additional Reference(s): USACE San Joaquin O&M Manual 7, April 1964, (HLM 2.99) 9-inch pipe listed]. FS Date: 8/20/2013						

LM Start	2.95	Rating **	M	Issue No.	951 (cont)
LM End	2.95	Issue Type +	En	Location *	

Photo 1 of 2 : UCIP_FA_2018_18089_30198.jpg



PVC wrapped pipe and siphon breaker visible on WS slope.

Photo 2 of 2 : UCIP_FA_2018_18089_30197.jpg



Pipe, pump, power pole, and meter visible off LS toe.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	2.96	Rating **	U	Issue No.	71
LM End	2.96	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR Erosion Survey			37.913010 °	37.913010 °
				-121.324490 °	-121.324490 °
DWR ID	RD0524U01RM43.52				
Comment Code					
Inspector Comment					
09/13/2017: A new pocket erosion observed at the eroison site, next to an irrigation pipe.					
07/25/2016: No significant change observed.					
06/24/2015: No significant change observed.					
06/19/2014: No significant change observed.					
08/13/2013: No significant change observed.					
08/07/2012: The site was first reported in 2012 spring levee inspection report. [2017 Site ID:RD0524U01RM43.52]					

LM Start	2.96	Rating **	U	Issue No.	71 (cont)
LM End	2.96	Issue Type +	Ma	Location *	WS

Photo 1 of 4 : FA_2018_RD0524_107_71_20180906_00123.jpg



Front view of the erosion.

Photo 2 of 4 : FA_2018_RD0524_107_71_20180906_00124.jpg



View of the newly developed pocket erosion next to an irrigation pipe.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable N : Not Inspected/Rated M : Minimally Acceptable C : Corrected U : Unacceptable A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	2.96	Rating **	U	Issue No.	71 (cont)	
LM End	2.96	Issue Type +	Ma	Location *	WS	
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR Erosion Survey			37.913010 °	37.913010 °	
				-121.324490 °	-121.324490 °	
DWR ID	RD0524U01RM43.52					
Comment Code						
Inspector Comment						
09/13/2017: A new pocket erosion observed at the eroison site, next to an irrigation pipe.						
07/25/2016: No significant change observed.						
06/24/2015: No significant change observed.						
06/19/2014: No significant change observed.						
08/13/2013: No significant change observed.						
08/07/2012: The site was first reported in 2012 spring levee inspection report. [2017 Site ID:RD0524U01RM43.52]						

LM Start	2.96	Rating **	U	Issue No.	71 (cont)
LM End	2.96	Issue Type +	Ma	Location *	WS

Photo 3 of 4 : FA_2018_RD0524_107_71_20180906_00125.jpg



Close view of the erosion.

Photo 4 of 4 : FA_2018_RD0524_107_71_20180906_00126.jpg



Close view of the erosion. Note the new pocket erosion next to the irrigation pipe on the site.

*** Location**
LS : Land Side N/A : Not Applicable
WS : Water Side
CR : Crown

**** Rating**
A : Acceptable N : Not Inspected/Rated
M : Minimally Acceptable C : Corrected
U : Unacceptable A/W : Acceptable but Monitor & Maintain

+ Issue Type
Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	2.96	Rating **	A/W	Issue No.	227
LM End		Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	2017 Storm Damage			37.912900 °	°
				-121.324400 °	°
DWR ID	DWR_RD0524_01_f_2017_227				

Comment Code

Inspector Comment

Levee Evaluation Comments

Description: Slope protection repairs are needed along the waterside slope due to erosion. Based upon levee inspections, it was determined the waterside levee slopes were eroding, deteriorating and degrading in concave pocket sections at various locations along this levee reach. The eroded levee sections need to be restored back to design standards to prevent further deterioration of the damaged levee sections.

Site ID No: 465

Site Designation: LMA-292

Repair Type: Erosion

Rating: Area of Concern

Field Date: 7/26/2017

Notes: Lower priority because erosion is within rip rap, is only present on lower slope and is not too deep. Levee is narrow here.

LM Start	2.96	Rating **	A/W	Issue No.	227 (cont)
LM End		Issue Type +	Ma	Location *	

Photo 1 of 2 : LEVAL_FA_2018_465_2231.jpg



Photo 2 of 2 : LEVAL_FA_2018_465_2232.jpg



* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable N : Not Inspected/Rated M : Minimally Acceptable C : Corrected U : Unacceptable A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	2.99	Rating **	A/W	Issue No.	228
LM End	3.01	Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	2017 Storm Damage			37.912500 °	37.912300 °
				-121.324700 °	-121.324700 °
DWR ID	DWR_RD0524_01_f_2017_228				
Comment Code					
Inspector Comment					
Levee Evaluation Comments					
Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.					
Site ID No:529					
Site Designation:LMA-435					
Repair Type: Erosion					
Rating:Area of Concern					
Field Date:8/10/2017					
Notes:					

Photo 1 of 3 : LEVAL_FA_2018_529_4187.jpg



LM Start	2.99	Rating **	A/W	Issue No.	228 (cont)
LM End	3.01	Issue Type +	Ma	Location *	

Photo 2 of 3 : LEVAL_FA_2018_529_4188.jpg



* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	2.99	Rating **	A/W	Issue No.	228 (cont)							
LM End	3.01	Issue Type +	Ma	Location *								
Category	Supplemental		GPS Latitude/Longitude									
			Start	End								
Item	2017 Storm Damage		37.912500 °	37.912300 °								
			-121.324700 °	-121.324700 °								
DWR ID	DWR_RD0524_01_f_2017_228											
Comment Code												
Inspector Comment												
Levee Evaluation Comments Description: Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage. Site ID No: 529 Site Designation: LMA-435 Repair Type: Erosion Rating: Area of Concern Field Date: 8/10/2017 Notes:												

Photo 3 of 3 : LEVAL_FA_2018_529_4189.jpg



LM Start	3.02	Rating **	M	Issue No.	924							
LM End	3.02	Issue Type +	Ma	Location *	LS							
Category	Earthen Levee		GPS Latitude/Longitude									
			Start	End								
Item	Animal Control		37.912163 °	37.912163 °								
			-121.324702 °	-121.324702 °								
DWR ID	DWR_RD0524_01_s_2012_924											
Comment Code												
A2 : Repair the levee slope damaged by livestock and prevent large animal access. Inspector Comment												

No Photos

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	3.07	Rating **	M	Issue No.	925
LM End	3.27	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			37.911382 °	37.908602 °
				-121.324928 °	-121.325395 °
DWR ID	DWR_RD0524_01_s_2012_925				
Comment Code					
A1 : Exterminate rodents and backfill and compact or grout burrows.					
Inspector Comment					
Several rodent holes on levee slopes.					

Photo 1 of 3 : FA_2018_RD0524_107_925_20180906_00364.jpg



Looking southwest at the landside slope.

LM Start	3.07	Rating **	M	Issue No.	925 (cont)
LM End	3.27	Issue Type +	Ma	Location *	LS

Photo 2 of 3 : FA_2018_RD0524_107_925_20180906_00365.jpg



Looking at typical view of rodent hole with this section fall 2015.

LM Start	3.07	Rating **	M	Issue No.	925 (cont)
LM End	3.27	Issue Type +	Ma	Location *	LS

Photo 3 of 3 : FA_2018_RD0524_107_925_20180906_00366.jpg



Looking at typical rodent holes on landward slope along this reach.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	3.10	Rating **	U	Issue No.	169
LM End	3.10	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.911070 °	37.911070 °
				-121.325090 °	-121.325090 °
DWR ID	DWR_RD0524_01_f_2015_169				
Comment Code					
GA : Garbage					
Inspector Comment					
Rubber tire stockpile at landside toe.					

Photo 1 of 1 : FA_2018_RD0524_107_169_20180906_00220.jpg



Looking west at rubber tires at landward toe.

LM Start	3.11	Rating **	M	Issue No.	212
LM End	3.27	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.910876 °	37.908558 °
				-121.325181 °	-121.325394 °
DWR ID	DWR_RD0524_01_s_2016_212				
Comment Code					
DT : Ditch					
Inspector Comment					
Shallow drainage ditch at landside toe.					

Photo 1 of 2 : FA_2018_RD0524_107_212_20180906_00278.jpg



Looking northwest at southend of ditch at landward toe.

LM Start	3.11	Rating **	M	Issue No.	212 (cont)
LM End	3.27	Issue Type +	En	Location *	LS

Photo 2 of 2 : FA_2018_RD0524_107_212_20180906_00279.jpg



Looking southwest at northend of ditch at landward toe.

*** Location**

LS : Land Side N/A : Not Applicable
WS : Water Side
CR : Crown

**** Rating**

A : Acceptable N : Not Inspected/Rated
M : Minimally Acceptable C : Corrected
U : Unacceptable A/W : Acceptable but Monitor & Maintain


+ Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

Levee Inspection Report By Mile - Fall 2018

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

Photo 1 of 1 : FA_2018_RD0524_107_211_20180906_00277.jpg



A photograph showing a gravel-covered landward slope. A concrete curb runs along the edge of the slope, separating it from a paved road. In the background, there are some buildings and a large pile of white material, possibly snow or debris, on the right side of the road.

Looking northwest at unauthorized ramp on landward slope.

Photo 1 of 2 : LEVAL_FA_2018_466_2228.jpg

A photograph showing a body of water, possibly a reservoir or lake, with a grassy and brushy shoreline in the foreground. In the background, there are several houses and a line of trees under a clear sky. The water is dark and calm, reflecting the sky. The shoreline in the foreground is composed of dry grass and some small shrubs. The background shows a residential area with houses and a line of trees.

Wednesday, December 26, 2018 18:29 **FINAL DATA** Page 121 of 198

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	3.23	Rating **	A/W	Issue No.	229 (cont)					
LM End		Issue Type +	Ma	Location *						
Category	Supplemental			GPS Latitude/Longitude						
				Start	End					
Item	2017 Storm Damage			37.909200 °	°					
				-121.325300 °	°					
DWR ID	DWR_RD0524_01_f_2017_229									
Comment Code										
Inspector Comment										
<p>Levee Evaluation Comments</p> <p>Description: Slope protection repairs are needed along the waterside slope due to erosion. Based upon levee inspections, it was determined the waterside levee slopes were eroding, deteriorating and degrading in concave pocket sections at various locations along this levee reach. The eroded levee sections need to be restored back to design standards to prevent further deterioration of the damaged levee sections.</p> <p>Site ID No: 466</p> <p>Site Designation: LMA-293</p> <p>Repair Type: Erosion</p> <p>Rating: Area of Concern</p> <p>Field Date: 7/26/2017</p> <p>Notes: Lower priority because damage is only on the lower 1/5 of slope. The slopes US and DS are rocky. Levee is narrow here.</p>										

Photo 2 of 2 : LEVAL_FA_2018_466_2229.jpg



LM Start	3.26	Rating **	A/W	Issue No.	230					
LM End	3.26	Issue Type +	Ma	Location *						
Category	Supplemental			GPS Latitude/Longitude						
				Start	End					
Item	2017 Storm Damage			37.908800 °	37.908700 °					
				-121.325400 °	-121.325300 °					
DWR ID	DWR_RD0524_01_f_2017_230									
Comment Code										
Inspector Comment										
<p>Levee Evaluation Comments</p> <p>Description: Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.</p> <p>Site ID No: 528</p> <p>Site Designation: LMA-434</p> <p>Repair Type: Erosion</p> <p>Rating: Area of Concern</p> <p>Field Date: 8/10/2017</p> <p>Notes: combined with LMA-433</p>										

Photo 1 of 3 : LEVAL_FA_2018_528_4193.jpg



* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable N : Not Inspected/Rated M : Minimally Acceptable C : Corrected U : Unacceptable A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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Reclamation District No. 0524 Middle Roberts Island

A photograph showing a riverbank. On the right side, there is a dense, overhanging tree with green leaves. The foreground is a grassy bank with patches of sunlight and shadow. The river water is visible in the background, extending to the horizon. A date stamp "2011-02-AUG/10/2017" is visible in the bottom right corner of the image.Page 123 of 198

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	3.27	Rating **	A/W	Issue No.	231
LM End	3.28	Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	2017 Storm Damage			37.908600 °	37.908500 °
				-121.325400 °	-121.325400 °
DWR ID	DWR_RD0524_01_f_2017_231				
Comment Code					
Inspector Comment					
<p>Levee Evaluation Comments</p> <p>Description: Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.</p> <p>Site ID No: 527</p> <p>Site Designation: LMA-433</p> <p>Repair Type: Erosion</p> <p>Rating: Area of Concern</p> <p>Field Date: 8/10/2017</p> <p>Notes: combined with LMA-434</p>					

No Photos

LM Start	3.27	Rating **	M	Issue No.	186
LM End	3.27	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.908551 °	37.908551 °
				-121.325381 °	-121.325381 °
DWR ID	DWR_RD0524_01_s_2014_186				
Comment Code					
T1 : Trim trees to at least five feet above ground level.					
Inspector Comment					

No Photos

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	3.30	Rating **	A/W	Issue No.	232
LM End		Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	2017 Storm Damage			37.908200 °	°
				-121.325300 °	°
DWR ID	DWR_RD0524_01_f_2017_232				
Comment Code					
Inspector Comment					
Levee Evaluation Comments					
Description:Slope protection repairs are needed along the waterside slope due to erosion. Based upon levee inspections, it was determined the waterside levee slopes were eroding, deteriorating and degrading in concave pocket sections at various locations along this levee reach. The eroded levee sections need to be restored back to design standards to prevent further deterioration of the damaged levee sections.					
Site ID No:467					
Site Designation:LMA-294					
Repair Type: Erosion					
Rating:Area of Concern					
Field Date:7/26/2017					
Notes: It looks like new rip rap was played on the lower 1/4 of the slope. There is a 2-3 ft scarp above the rip rap.					

Photo 1 of 3 : LEVAL_FA_2018_467_2223.jpg



LM Start	3.30	Rating **	A/W	Issue No.	232 (cont)
LM End		Issue Type +	Ma	Location *	

Photo 2 of 3 : LEVAL_FA_2018_467_2224.jpg



* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	3.30	Rating **	A/W	Issue No.	232 (cont)							
LM End		Issue Type +	Ma	Location *								
Category	Supplemental		GPS Latitude/Longitude									
			Start	End								
Item	2017 Storm Damage		37.908200 °	°								
			-121.325300 °	°								
DWR ID	DWR_RD0524_01_f_2017_232											
Comment Code												
Inspector Comment												
<p>Levee Evaluation Comments</p> <p>Description: Slope protection repairs are needed along the waterside slope due to erosion. Based upon levee inspections, it was determined the waterside levee slopes were eroding, deteriorating and degrading in concave pocket sections at various locations along this levee reach. The eroded levee sections need to be restored back to design standards to prevent further deterioration of the damaged levee sections.</p> <p>Site ID No: 467</p> <p>Site Designation: LMA-294</p> <p>Repair Type: Erosion</p> <p>Rating: Area of Concern</p> <p>Field Date: 7/26/2017</p> <p>Notes: It looks like new rip rap was placed on the lower 1/4 of the slope. There is a 2-3 ft scarp above the rip rap.</p>												

Photo 3 of 3 : LEVAL_FA_2018_467_2225.jpg



LM Start	3.30	Rating **	U	Issue No.	79							
LM End	3.32	Issue Type +	Ma	Location *	WS							
Category	Supplemental		GPS Latitude/Longitude									
			Start	End								
Item	DWR Erosion Survey		37.908090 °	37.908090 °								
			-121.325090 °	-121.325090 °								
DWR ID	RD0524U01RM43.86											
Comment Code												
Inspector Comment												
<p>09/13/2017: No significant change observed.</p> <p>07/25/2016: No significant change observed.</p> <p>06/24/2015: No significant change observed.</p> <p>06/19/2014: No significant change observed.</p> <p>08/13/2013: The levee toe seems to have been protected by river rocks and vegetation on site. [2017 Site ID: RD0524U01RM43.86]</p>												

Photo 1 of 4 : FA_2018_RD0524_107_79_20180906_00136.jpg



Front View of the erosion.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	3.30	Rating **	U	Issue No.	79 (cont)
LM End	3.32	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR Erosion Survey			37.908090 °	37.908090 °
				-121.325090 °	-121.325090 °
DWR ID	RD0524U01RM43.86				
Comment Code					
Inspector Comment					
09/13/2017: No significant change observed.					
07/25/2016: No significant change observed.					
06/24/2015: No significant change observed.					
06/19/2014: No significant change observed.					
08/13/2013: The levee toe seems to have been protected by river rocks and vegetation on site. [2017 Site ID:RD0524U01RM43.86]					

LM Start	3.30	Rating **	U	Issue No.	79 (cont)
LM End	3.32	Issue Type +	Ma	Location *	WS

Photo 2 of 4 : FA_2018_RD0524_107_79_20180906_00137.jpg



Front view of the erosion.

Photo 3 of 4 : FA_2018_RD0524_107_79_20180906_00138.jpg



Close view of the erosion. Note the river rocks and vegetation at the levee toe.

LM Start	3.30	Rating **	U	Issue No.	79 (cont)
LM End	3.32	Issue Type +	Ma	Location *	WS

Photo 4 of 4 : FA_2018_RD0524_107_79_20180906_00139.jpg



Front View of the erosion.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	3.30	Rating **	U	Issue No.	926
LM End	3.37	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.908158°	37.907112°
				-121.325418°	-121.325350°
DWR ID	DWR_RD0524_01_s_2012_926				
Comment Code					
T1 : Trim trees to at least five feet above ground level.					
Inspector Comment					

Photo 1 of 2 : FA_2018_RD0524_107_926_20180906_00367.jpg



Looking southwest at dense veg on landward slope.

LM Start	3.30	Rating **	U	Issue No.	926 (cont)
LM End	3.37	Issue Type +	Ma	Location *	LS

Photo 2 of 2 : FA_2018_RD0524_107_926_20180906_00368.jpg



Looking at untrimmed trees on landward slope and toe.

LM Start	3.32	Rating **	C	Issue No.	162
LM End	3.32	Issue Type +	En	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.907885 °	37.907885 °
				-121.325428 °	-121.325428 °
DWR ID	DWR_RD0524_01_s_2017_162				
Comment Code					
TR : Tree or limb					
Inspector Comment					
Downed tree limbs on landside slope					

No Photos

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	3.35	Rating **	U	Issue No.	952
LM End	3.35	Issue Type +	En	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			37.907504 °	37.907504 °
				-121.325420 °	-121.325420 °
DWR ID	20618				
Comment Code					
Inspector Comment					
FS_ID:53357 DS_ID:20618 EP_NO: N/A Repair Type: Urgent Crossing Status: Found UCIP Comments: 10/2/2018 Same as previous inspection with severe LS slope integrity issues (D. Sanoski - DWR UCIP).11/16/2016 same as previous inspection erosion is still present on LS toe and slope. Owner will need to coordinate with CVFPB to address erosion issue on LS toe. (O. Magana - DWR UCIP)08/20/2013 Extensive erosion on LS toe at distribution box due to failure of box/pipe connection. Erosion on LS slope do to recently repaired leak at gate valve. (W. Wylie - DWR UCIP) FIELD_STRUCT_DESC: 14-inch steel irrigation pipe through the levee, 7 feet below the crown. Pump house located on the waterside (WS) slope. Gate valve located on the landside (LS) slope. 4-foot by 4-foot brick distribution box, built in 1918, located on the LS toe. This site was used to manufacture brick back in 1918, and some of the appurtenances that remain are still in use (distribution box and ditch). [Additional Reference(s): DWR Levee Log, 2004. USACE San Joaquin O&M Manual 7, April 1964, (HLM 3.38) 12-inch pipe listed, (conversation with owner, 2016)]. FS Date: 10/2/2018 1:42:00 PM					

LM Start	3.35	Rating **	U	Issue No.	952 (cont)
LM End	3.35	Issue Type +	En	Location *	

Photo 1 of 3 : UCIP_FA_2018_53357_30206.jpg



Pipe and pumphouse on WS slope.

Photo 2 of 3 : UCIP_FA_2018_53357_30205.jpg



Pipe, gatevalve, and erosion on LS slope.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	3.35	Rating **	U	Issue No.	952 (cont)	
LM End	3.35	Issue Type +	En	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR UCIP Field Study			37.907504 °	37.907504 °	
				-121.325420 °	-121.325420 °	
DWR ID	20618					
Comment Code						
Inspector Comment						
FS_ID:53357						
DS_ID:20618						
EP_NO: N/A						
Repair Type: Urgent						
Crossing Status: Found						
UCIP Comments: 10/2/2018 Same as previous inspection with severe LS slope integrity issues (D. Sanoski - DWR UCIP).11/16/2016 same as previous inspection erosion is still present on LS toe and slope. Owner will need to coordinate with CVFPB to address erosion issue on LS toe. (O. Magana - DWR UCIP)08/20/2013 Extensive erosion on LS toe at distribution box due to failure of box/pipe connection. Erosion on LS slope do to recently repaired leak at gate valve. (W. Wylie - DWR UCIP)						
FIELD_STRUCT_DESC: 14-inch steel irrigation pipe through the levee, 7 feet below the crown. Pump house located on the waterside (WS) slope. Gate valve located on the landside (LS) slope. 4-foot by 4-foot brick distribution box, built in 1918, located on the LS toe. This site was used to manufacture brick back in 1918, and some of the appurtenances that remain are still in use (distribution box and ditch). [Additional Reference(s): DWR Levee Log, 2004. USACE San Joaquin O&M Manual 7, April 1964, (HLM 3.38) 12-inch pipe listed, (conversation with owner, 2016)].						
FS Date: 10/2/2018 1:42:00 PM						

Photo 3 of 3 : UCIP_FA_2018_53357_30204.jpg



Extensive erosion around distribution box at LS toe.

LM Start	3.37	Rating **	M	Issue No.	53
LM End	3.37	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			37.907132 °	37.907132 °
				-121.325352 °	-121.325352 °
DWR ID	DWR_RD0524_01_s_2012_53				
Comment Code					
A1 : Exterminate rodents and backfill and compact or grout burrows.					
Inspector Comment					

No Photos

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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Reclamation District No. 0524 Middle Roberts Island

No Photos

Looking northwest at dense vegetation on landside slope.

Looking at dead tree limb at landward toe fall 2015.

Page 131 of 198

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	3.51	Rating **	U	Issue No.	57
LM End	3.59	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.905638 °	37.904570 °
				-121.323892 °	-121.324215 °
DWR ID	DWR_RD0524_01_s _ 2012_57				
Comment Code					
T3 : Trim and thin trees to allow visibility of the ground and room to flood fight.					
Inspector Comment					

Photo 1 of 1 : FA_2018_RD0524_107_57_20180906_00101.jpg



Looking south at dense trees on landward slope.

LM Start	3.51	Rating **	M	Issue No.	265
LM End	3.51	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.905552 °	37.905552 °
				-121.323847 °	-121.323847 °
DWR ID	DWR_RD0524_01_s _ 2012_265				
Comment Code					
RA : Ramp					
Inspector Comment					
Unauthorized ramp on landside slope.					

Photo 1 of 1 : FA_2018_RD0524_107_265_20180906_00354.jpg



Looking southeast at unauthorized ramp on landside slope and toe.

*** Location**

LS : Land Side N/A : Not Applicable
WS : Water Side
CR : Crown

**** Rating**

A : Acceptable N : Not Inspected/Rated
M : Minimally Acceptable C : Corrected
U : Unacceptable A/W : Acceptable but Monitor & Maintain

+ Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	3.53	Rating **	A/W	Issue No.	233
LM End	3.54	Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	2017 Storm Damage			37.905300 °	37.905200 °
				-121.323800 °	-121.323900 °
DWR ID	DWR_RD0524_01_f_2017_233				
Comment Code					
Inspector Comment					
Levee Evaluation Comments					
Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.					
Site ID No:526					
Site Designation:LMA-432					
Repair Type: Erosion					
Rating:Area of Concern					
Field Date:8/10/2017					
Notes:					

Photo 1 of 3 : LEVAL_FA_2018_526_4201.jpg



LM Start	3.53	Rating **	A/W	Issue No.	233 (cont)
LM End	3.54	Issue Type +	Ma	Location *	

Photo 2 of 3 : LEVAL_FA_2018_526_4202.jpg



* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	3.53	Rating **	A/W	Issue No.	233 (cont)					
LM End	3.54	Issue Type +	Ma	Location *						
Category	Supplemental		GPS Latitude/Longitude							
			Start	End						
Item	2017 Storm Damage		37.905300°	37.905200°						
			-121.323800°	-121.323900°						
DWR ID	DWR_RD0524_01_f_2017_233									
Comment Code										
Inspector Comment										
<p>Levee Evaluation Comments</p> <p>Description: Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.</p> <p>Site ID No: 526</p> <p>Site Designation: LMA-432</p> <p>Repair Type: Erosion</p> <p>Rating: Area of Concern</p> <p>Field Date: 8/10/2017</p> <p>Notes:</p>										

Photo 3 of 3 : LEVAL_FA_2018_526_4203.jpg



LM Start	3.56	Rating **	A/W	Issue No.	234					
LM End	3.57	Issue Type +	Ma	Location *						
Category	Supplemental		GPS Latitude/Longitude							
			Start	End						
Item	2017 Storm Damage		37.904900°	37.904800°						
			-121.323900°	-121.324100°						
DWR ID	DWR_RD0524_01_f_2017_234									
Comment Code										
Inspector Comment										
<p>Levee Evaluation Comments</p> <p>Description: Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.</p> <p>Site ID No: 525</p> <p>Site Designation: LMA-431</p> <p>Repair Type: Erosion</p> <p>Rating: Area of Concern</p> <p>Field Date: 8/10/2017</p> <p>Notes:</p>										

Photo 1 of 3 : LEVAL_FA_2018_525_4205.jpg



* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	3.56	Rating **	A/W	Issue No.	234 (cont)	
LM End	3.57	Issue Type +	Ma	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	2017 Storm Damage			37.904900 °	37.904800 °	
				-121.323900 °	-121.324100 °	
DWR ID	DWR_RD0524_01_f_2017_234					
Comment Code						
Inspector Comment						
Levee Evaluation Comments						
Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.						
Site ID No:525						
Site Designation:LMA-431						
Repair Type: Erosion						
Rating:Area of Concern						
Field Date:8/10/2017						
Notes:						

Photo 2 of 3 : LEVAL_FA_2018_525_4206.jpg



LM Start	3.56	Rating **	A/W	Issue No.	234 (cont)
LM End	3.57	Issue Type +	Ma	Location *	

Photo 3 of 3 : LEVAL_FA_2018_525_4208.jpg



* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	3.61	Rating **	M	Issue No.	124
LM End	3.61	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.904375 °	37.904375 °
				-121.324615 °	-121.324615 °
DWR ID	DWR_RD0524_01_f_2012_124				
Comment Code					
V6 : Landscaping					
Inspector Comment					
Landowner planted cactus on landside toe.					

Photo 1 of 1 : FA_2018_RD0524_107_124_20180906_00188.jpg



Looking west at cactus on landside toe.

LM Start	3.62	Rating **	M	Issue No.	163
LM End	3.62	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			37.904348 °	37.904348 °
				-121.324683 °	-121.324683 °
DWR ID	DWR_RD0524_01_s_2017_163				
Comment Code					
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.					
Inspector Comment					

No Photos

LM Start	3.64	Rating **	C	Issue No.	58
LM End	3.64	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			37.904113 °	37.904113 °
				-121.325080 °	-121.325080 °
DWR ID	DWR_RD0524_01_s_2012_58				
Comment Code					
S2 : Repair the levee slope damaged by foot traffic and prevent access where possible.					
Inspector Comment					
Landowner cut steps into waterside slope.					
4/3/17: Steps washed away slope damage remains.					


No Photos

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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Levee Inspection Report By Mile - Fall 2018

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

Photo 1 of 1 : FA_2018_RD0524_107_190_20180906_00250.jpg




Looking southwest at century plant at landward toe fall 2015.

Photo 1 of 1 : FA_2018_RD0524_107_164_20180906_00215.jpg



Looking south at abandoned deck on landward shoulder and slope.

Photo 1 of 1 : FA_2018_RD0524_107_251_20180906_00340.jpg



Looking northwest at the waterside slope.

* Location	** Rating	+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable N : Not Inspected/Rated M : Minimally Acceptable C : Corrected U : Unacceptable A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	3.67	Rating **	A/W	Issue No.	192
LM End	3.67	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.903782 °	37.903782 °
				-121.325363 °	-121.325363 °
DWR ID	DWR_RD0524_01_s_2015_192				
Comment Code					
PR : Prunings					
Inspector Comment					
Large pruning piles at landside toe.					

Photo 1 of 1 : FA_2018_RD0524_107_192_20180906_00251.jpg



Looking west at pruning pile at landward toe.

LM Start	3.69	Rating **	U	Issue No.	194
LM End	3.78	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.903553 °	37.902505 °
				-121.325468 °	-121.326425 °
DWR ID	DWR_RD0524_01_s_2015_194				
Comment Code					
DT : Ditch					
Inspector Comment					
Shallow Irrigation ditch at landside toe.					

Photo 1 of 2 : FA_2018_RD0524_107_194_20180906_00255.jpg



Looking south at irrigation ditch at landward toe.

LM Start	3.69	Rating **	U	Issue No.	194 (cont)
LM End	3.78	Issue Type +	En	Location *	LS

Photo 2 of 2 : FA_2018_RD0524_107_194_20180906_00256.jpg



Looking east at south end of irrigation ditch at landward toe.

*** Location**
LS : Land Side N/A : Not Applicable
WS : Water Side
CR : Crown

**** Rating**
A : Acceptable N : Not Inspected/Rated
M : Minimally Acceptable C : Corrected
U : Unacceptable A/W : Acceptable but Monitor & Maintain

+ Issue Type
Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	3.72	Rating **	A/W	Issue No.	252
LM End	3.78	Issue Type +	Ma	Location *	CR
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.903120 °	37.902527 °
				-121.325846 °	-121.326372 °
DWR ID	DWR_RD0524_01_f_2017_252				
Comment Code					
V2 : Remove the wild growth other than native grasses from the levee slopes.					
Inspector Comment					
Contorl vegetation growth on crown.					

No Photos

LM Start	3.75	Rating **	U	Issue No.	52
LM End	3.75	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.902828 °	37.902828 °
				-121.326170 °	-121.326170 °
DWR ID	DWR_RD0524_01_s_2016_52				
Comment Code					
T1 : Trim trees to at least five feet above ground level.					
Inspector Comment					

Photo 1 of 1 : FA_2018_RD0524_107_52_20180906_00094.jpg



Looking south at untrimmed tree on landward slope and toe.

LM Start	3.77	Rating **	U	Issue No.	927
LM End	3.77	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.902645 °	37.902645 °
				-121.326340 °	-121.326340 °
DWR ID	DWR_RD0524_01_s_2012_927				
Comment Code					
T1 : Trim trees to at least five feet above ground level.					
Inspector Comment					
Untrimmed almond tree on landside slope.					

Photo 1 of 1 : FA_2018_RD0524_107_927_20180906_00369.jpg



Looking southwest at untrimmed tree at landward toe.

*** Location**

LS : Land Side N/A : Not Applicable
WS : Water Side
CR : Crown

**** Rating**

A : Acceptable N : Not Inspected/Rated
M : Minimally Acceptable C : Corrected
U : Unacceptable A/W : Acceptable but Monitor & Maintain

+ Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	3.79	Rating **	M	Issue No.	953
LM End	3.79	Issue Type +	En	Location *	
Category	Supplemental		GPS Latitude/Longitude		
			Start	End	
Item	DWR UCIP Field Study		37.902371°	37.902371°	
			-121.326440°	-121.326440°	
DWR ID	24044				

Comment Code

Inspector Comment

FS_ID:22725
DS_ID:24044
EP_NO: N/A
Repair Type: Non-Urgent
Crossing Status: Found
UCIP Comments: No permit identified for this crossing.
FIELD_STRUCT_DESC: 8-inch steel irrigation pipe through the levee, 0 feet below the crown. Pipe integrated into steel cattle guard style crossing. Slant pump and butterfly valve at concrete foundation on the waterside (WS) slope. Filter plant, vents, and butterfly valves on the landside (LS) toe.
FS Date: 8/20/2013

LM Start	3.79	Rating **	M	Issue No.	953 (cont)
LM End	3.79	Issue Type +	En	Location *	

Photo 1 of 3 : UCIP_FA_2018_22725_38445.jpg



Pump and butterfly valve on concrete pad on WS shoulder.

Photo 2 of 3 : UCIP_FA_2018_22725_38444.jpg



Vent on PVC pipe at WS shoulder.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	3.79	Rating **	M	Issue No.	953 (cont)	
LM End	3.79	Issue Type +	En	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR UCIP Field Study			37.902371 °	37.902371 °	
				-121.326440 °	-121.326440 °	
DWR ID	24044					
Comment Code						
Inspector Comment						
FS_ID:22725						
DS_ID:24044						
EP_NO: N/A						
Repair Type: Non-Urgent						
Crossing Status: Found						
UCIP Comments: No permit identified for this crossing.						
FIELD_STRUCT_DESC: 8-inch steel irrigation pipe through the levee, 0						
feet below the crown. Pipe integrated into steel cattle guard style						
crossing. Slant pump and butterfly valve at concrete foundation on the						
waterside (WS) slope. Filter plant, vents, and butterfly valves on the						
landside (LS) toe.						
FS Date: 8/20/2013						

Photo 3 of 3 : UCIP_FA_2018_22725_38443.jpg



Steel, integrated cattle guard style pipe crossing at crown elevation.

LM Start	3.79	Rating **	M	Issue No.	954
LM End	3.79	Issue Type +	En	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			37.902361 °	37.902361 °
				-121.326443 °	-121.326443 °
DWR ID	20620				
Comment Code					
Inspector Comment					
FS_ID:18307					
DS_ID:20620					
EP_NO: N/A					
Repair Type: Non-Urgent					
Crossing Status: Found					
UCIP Comments: Appears abandoned and if so should be done so properly. Evidence of severe internal corrosion in concrete distribution box at LS toe.					
FIELD_STRUCT_DESC: 12-inch concrete encased steel irrigation pipe through the levee, 10.5 feet below the crown. Pump and gate valve in pump house on the waterside (WS) slope. 6-foot by 6-foot Concrete distribution box on the landside (LS) toe. Two concrete cutoff walls. Service pole at the LS toe. [Additional Reference(s): DWR Levee Log, 2004. USACE San Joaquin O&M Manual 7, April 1964, (HLM 3.83)].					
FS Date: 8/20/2013					

Photo 1 of 3 : UCIP_FA_2018_18307_30528.jpg



Slant pump visible at concrete foundation on WS slope. Pumphouse removed.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	3.79	Rating **	M	Issue No.	954 (cont)	
LM End	3.79	Issue Type +	En	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start		End
Item	DWR UCIP Field Study			37.902361 °		37.902361 °
				-121.326443 °		-121.326443 °
DWR ID	20620					
Comment Code						
Inspector Comment						
FS_ID:18307 DS_ID:20620 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: Appears abandoned and if so should be done so properly. Evidence of severe internal corrosion in concrete distribution box at LS toe. FIELD_STRUCT_DESC: 12-inch concrete encased steel irrigation pipe through the levee, 10.5 feet below the crown. Pump and gate valve in pump house on the waterside (WS) slope. 6-foot by 6-foot Concrete distribution box on the landside (LS) toe. Two concrete cutoff walls. Service pole at the LS toe. [Additional Reference(s): DWR Levee Log, 2004. USACE San Joaquin O&M Manual 7, April 1964, (HLM 3.83)]. FS Date: 8/20/2013						

LM Start	3.79	Rating **	M	Issue No.	954 (cont)
LM End	3.79	Issue Type +	En	Location *	

Photo 2 of 3 : UCIP_FA_2018_18307_30527.jpg



Slant pump and pipe on WS slope.

Photo 3 of 3 : UCIP_FA_2018_18307_30526.jpg



6'X6' concrete distribution box and power pole on LS toe.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	3.79	Rating **	U	Issue No.	59
LM End	3.80	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.902287°	37.902163°
				-121.326462°	-121.326476°
DWR ID	DWR_RD0524_01_s_2012_59				
Comment Code					
V6 : Landscaping					
Inspector Comment					
Downed tree on landward slope.					

Photo 1 of 2 : FA_2018_RD0524_107_59_20180906_00104.jpg



Looking south at dense veg on landward slope and toe.

LM Start	3.79	Rating **	U	Issue No.	59 (cont)
LM End	3.80	Issue Type +	En	Location *	LS

Photo 2 of 2 : FA_2018_RD0524_107_59_20180906_00105.jpg



Looking at fallen tree on landward slope. (Spring 2018)

LM Start	3.87	Rating **	U	Issue No.	95
LM End	3.97	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.901147 °	37.899764 °
				-121.326453 °	-121.326589 °
DWR ID	DWR_RD0524_01_f_2013_95				
Comment Code					
EQ : Equipment					
Inspector Comment					
Landowner is storing equipment on landside shoulder and landside toe.					

Photo 1 of 3 : FA_2018_RD0524_107_95_20180906_00161.jpg



Looking south at farm equipment stored on landward shoulder and toe.

*** Location**

LS : Land Side N/A : Not Applicable
WS : Water Side
CR : Crown

**** Rating**

A : Acceptable N : Not Inspected/Rated
M : Minimally Acceptable C : Corrected
U : Unacceptable A/W : Acceptable but Monitor & Maintain

+ Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

Levee Inspection Report By Mile - Fall 2018

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

Photo 2 of 3 : FA_2018_RD0524_107_95_20180906_00162.jpg




Looking north at farm equipment stored on landward shoulder.

Photo 3 of 3 : FA_2018_RD0524_107_95_20180906_00163.jpg



Looking west at farm equipment stored at landward toe.

Photo 1 of 2 : FA_2018_RD0524_107_94_20180906_00159.jpg



Looking southeast at cactus on waterward slope fall 2015

* Location	** Rating	+ Issue Type
LS : Land Side N/A : Not Applicable	A : Acceptable N : Not Inspected/Rated	Ma : Maintenance Deficiency
WS : Water Side	M : Minimally Acceptable C : Corrected	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable A/W : Acceptable but Monitor & Maintain	En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	3.89	Rating **	U	Issue No.	94 (cont)	
LM End	3.89	Issue Type +	Ma	Location *	WS	
Category	Earthen Levee			GPS Latitude/Longitude		
				Start		End
Item	Vegetation			37.900940 °		37.900940 °
				-121.326414 °		-121.326414 °
DWR ID	DWR_RD0524_01_s_2012_94					
Comment Code						
V2 : Remove the wild growth other than native grasses from the levee slopes.						
Inspector Comment						
Remove cactus from waterside slope.						

Photo 2 of 2 : FA_2018_RD0524_107_94_20180906_00160.jpg



Looking southeast at cactus on waterside slope. Fall 2013

LM Start	3.89	Rating **	U	Issue No.	83
LM End	3.90	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.900915 °	37.900760 °
				-121.326414 °	-121.326414 °
DWR ID	DWR_RD0524_01_f_2017_83				
Comment Code					
TR : Tree or limb					
Inspector Comment					
Untrimmed trees on landside slope.					

Photo 1 of 1 : FA_2018_RD0524_107_83_20180906_00147.jpg



Looking south at untrimmed trees on landward slope and toe.

*** Location**

LS : Land Side N/A : Not Applicable
WS : Water Side
CR : Crown

**** Rating**

A : Acceptable N : Not Inspected/Rated
M : Minimally Acceptable C : Corrected
U : Unacceptable A/W : Acceptable but Monitor & Maintain

+ Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	3.90	Rating **	M	Issue No.	955
LM End	3.90	Issue Type +	En	Location *	
Category	Supplemental		GPS Latitude/Longitude		
			Start	End	
Item	DWR UCIP Field Study		37.900778°	37.900778°	
			-121.326420°	-121.326420°	

DWR ID	20621
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Comment Code	
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Inspector Comment	
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FS_ID:41464
DS_ID:20621
EP_NO: N/A
Repair Type: Non-Urgent
Crossing Status: Found
UCIP Comments: Appears to be abandoned as signage has been removed.
FIELD_STRUCT_DESC: 2.5-inch submarine telephone conduit of an unknown material through the levee and across the channel, 2 feet below the crown. Sign posts remain on both sides of the river on the waterside (WS) slope. [Additional Reference(s): DWR Levee Log, 2004].
FS Date: 8/20/2013

LM Start	3.90	Rating **	M	Issue No.	955 (cont)
LM End	3.90	Issue Type +	En	Location *	

Photo 1 of 2 : UCIP_FA_2018_41464_30543.jpg



Sign posts with sign removed on WS slope.

Photo 2 of 2 : UCIP_FA_2018_41464_30542.jpg



Sign posts visible on opposite river bank in same condition.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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Levee Inspection Report By Mile - Fall 2018

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

Photo 1 of 1 : FA_2018_RD0524_107_253_20180906_00341.jpg



11-08-2017

Looking southwest at the landside slope.

Photo 1 of 1 : FA_2018_RD0524_107_254_20180906_00342.jpg



Looking southwest at the waterside slope.

Photo 1 of 2 : FA_2018_RD0524_107_195_20180906_00257.jpg



Looking southwest at large pruning pile at landward toe. (Fall 2016)

Wednesday, December 26, 2018 18:30 **FINAL DATA** Page 147 of 198

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	4.02	Rating **	U	Issue No.	195 (cont)	
LM End	4.02	Issue Type +	En	Location *	LS	
Category	Earthen Levee			GPS Latitude/Longitude		
				Start		End
Item	Encroachments			37.899093 °	37.899093 °	
				-121.326933 °	-121.326933 °	
DWR ID	DWR_RD0524_01_s_2015_195					
Comment Code						
PR : Prunings						
Inspector Comment						
Pruning pile blocking view of landside slope.						

Photo 2 of 2 : FA_2018_RD0524_107_195_20180906_00258.jpg



Looking at pruning pile at landward toe. (Spring 2016)

LM Start	4.02	Rating **	U	Issue No.	101
LM End	4.02	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.899027 °	37.899027 °
				-121.326982 °	-121.326982 °
DWR ID	DWR_RD0524_01_s_2012_101				
Comment Code					
RA : Ramp					
Inspector Comment					
Unauthorized ramp. Ramp does not meet Title 23 standard.					

Photo 1 of 1 : FA_2018_RD0524_107_101_20180906_00165.jpg



Looking west at unauthorized ramp on landside slope.

LM Start	4.03	Rating **	M	Issue No.	61
LM End	4.03	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.898925 °	37.898925 °
				-121.327015 °	-121.327015 °
DWR ID	DWR_RD0524_01_s_2012_61				
Comment Code					
T1 : Trim trees to at least five feet above ground level.					
Inspector Comment					

Photo 1 of 1 : FA_2018_RD0524_107_61_20180906_00110.jpg



Looking east at untrimmed tree at landward toe.

*** Location**

LS : Land Side N/A : Not Applicable
WS : Water Side
CR : Crown

**** Rating**

A : Acceptable N : Not Inspected/Rated
M : Minimally Acceptable C : Corrected
U : Unacceptable A/W : Acceptable but Monitor & Maintain

+ Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	4.04	Rating **	M	Issue No.	956
LM End	4.04	Issue Type +	En	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			37.898853 °	37.898853 °
				-121.327049 °	-121.327049 °
DWR ID	20623				
Comment Code					
Inspector Comment					
FS_ID:18314 DS_ID:20623 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: Appears abandoned and if so should be done so properly. FIELD_STRUCT_DESC: 8-inch concrete encased steel irrigation pipe through the levee, 9.5 feet below the crown. Pump and gate valve in pump house on the waterside (WS) slope. Slide gate in 42-inch corrugated metal pipe riser unit on the WS slope. Brick standpipe at the toe of the landside (LS) slope. 1.5-inch galvanized iron electrical conduit through the levee, 3 feet below the crown at the same location. [Additional Reference(s): DWR Levee Log, 2004. USACE San Joaquin O&M Manual 7, April 1964, (HLM 4.08)]. FS Date: 8/20/2013					



Electrical conduit visible on WS slope at pumphouse.

LM Start	4.04	Rating **	M	Issue No.	956 (cont)
LM End	4.04	Issue Type +	En	Location *	



Pumphouse and gate valve in CMP riser on WS slope.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

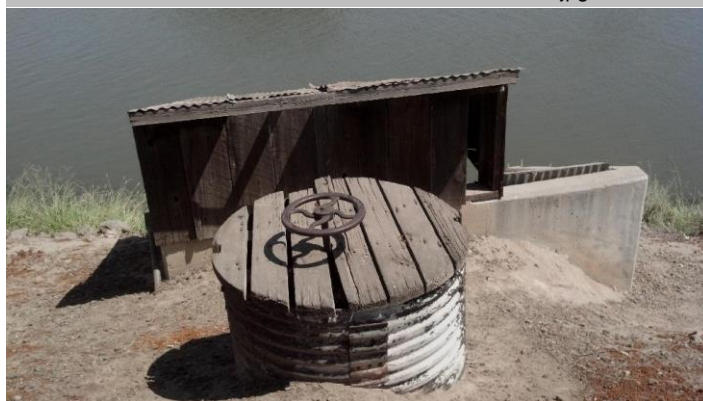
Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	4.04	Rating **	M	Issue No.	956 (cont)	
LM End	4.04	Issue Type +	En	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR UCIP Field Study			37.898853 °	37.898853 °	
				-121.327049 °	-121.327049 °	
DWR ID	20623					
Comment Code						
Inspector Comment						
FS_ID:18314						
DS_ID:20623						
EP_NO: N/A						
Repair Type: Non-Urgent						
Crossing Status: Found						
UCIP Comments: Appears abandoned and if so should be done so properly.						
FIELD_STRUCT_DESC: 8-inch concrete encased steel irrigation pipe through the levee, 9.5 feet below the crown. Pump and gate valve in pump house on the waterside (WS) slope. Slide gate in 42-inch corrugated metal pipe riser unit on the WS slope. Brick standpipe at the toe of the landside (LS) slope. 1.5-inch galvanized iron electrical conduit through the levee, 3 feet below the crown at the same location.						
[Additional Reference(s): DWR Levee Log, 2004. USACE San Joaquin O&M Manual 7, April 1964, (HLM 4.08)].						
FS Date: 8/20/2013						

Photo 3 of 3 : UCIP_FA_2018_18314_30560.jpg



Pumphouse and gate valve in CMP riser on WS slope.

LM Start	4.10	Rating **	C	Issue No.	108
LM End	4.15	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			37.898035 °	37.898071 °
				-121.327447 °	-121.327806 °
DWR ID	DWR_RD0524_01_s_2012_108				
Comment Code					
S1 : Repair slope instability.					
Inspector Comment					
Slope depression is greater than 1" and longer than 200'.					

No Photos

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	4.16	Rating **	M	Issue No.	213
LM End	4.16	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.897235 °	37.897235 °
				-121.327865 °	-121.327865 °
DWR ID	DWR_RD0524_01_s_2016_213				
Comment Code					
GA : Garbage					
Inspector Comment					
Old fence post and concrete and brick rubble on landside slope.					

Photo 1 of 1 : FA_2018_RD0524_107_213_20180906_00280.jpg



Looking west at old fence post and concrete rubble on landward slope.

LM Start	4.16	Rating **	M	Issue No.	957
LM End	4.16	Issue Type +	En	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			37.897118 °	37.897118 °
				-121.327910 °	-121.327910 °
DWR ID	20625				
Comment Code					
Inspector Comment					
FS_ID:18318 DS_ID:20625 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: Small leak on WS slope causing minor erosion on WS slope. FIELD_STRUCT_DESC: 12-inch steel irrigation pipe through the levee, 4.5 feet below the crown. Pump house and gate valve on the waterside (WS) slope. 36-inch concrete standpipe, power pole, and meter on the landside (LS) toe. [Additional Reference(s): DWR Levee Log, 2004. USACE San Joaquin O&M Manual 7, April 1964, (HLM 4.21)]. FS Date: 8/23/2013					

Photo 1 of 3 : UCIP_FA_2018_18318_30589.jpg



Concrete standpipe on LS slope.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	4.16	Rating **	M	Issue No.	957 (cont)
LM End	4.16	Issue Type +	En	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			37.897118 °	37.897118 °
				-121.327910 °	-121.327910 °
DWR ID	20625				
Comment Code					
Inspector Comment					
FS_ID:18318 DS_ID:20625 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: Small leak on WS slope causing minor erosion on WS slope. FIELD_STRUCT_DESC: 12-inch steel irrigation pipe through the levee, 4.5 feet below the crown. Pump house and gate valve on the waterside (WS) slope. 36-inch concrete standpipe, power pole, and meter on the landside (LS) toe. [Additional Reference(s): DWR Levee Log, 2004. USACE San Joaquin O&M Manual 7, April 1964, (HLM 4.21)]. FS Date: 8/23/2013					

Photo 2 of 3 : UCIP_FA_2018_18318_30588.jpg



Vent or siphon breaker just off LS shoulder.

LM Start	4.16	Rating **	M	Issue No.	957 (cont)
LM End	4.16	Issue Type +	En	Location *	

Photo 3 of 3 : UCIP_FA_2018_18318_30587.jpg



Pumphouse and pipe on WS slope.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	4.16	Rating **	M	Issue No.	110
LM End	4.16	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.897103°	37.897103°
				-121.327895°	-121.327895°
DWR ID	DWR_RD0524_01_s_2012_110				
Comment Code					
RA : Ramp					
Inspector Comment					
Two unauthorized ramps on landside slope.					

Photo 1 of 1 : FA_2018_RD0524_107_110_20180906_00173.jpg



Looking southwest at an unauthorized ramp on landside slope.

LM Start	4.17	Rating **	M	Issue No.	958	
LM End	4.17	Issue Type +	En	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR UCIP Field Study			37.897074°	37.897074°	
				-121.327926°	-121.327926°	
DWR ID	24049					
Comment Code						
Inspector Comment						
FS_ID:22069 DS_ID:24049 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: No permit identified for this crossing. FIELD_STRUCT_DESC: 2.25-inch polyvinyl chloride domestic water service line through the levee, 5 feet below the crown. Pump and tank on the waterside (WS) slope with a vent on the landside (LS) slope. FS Date: 8/23/2013						

Photo 1 of 2 : UCIP_FA_2018_22069_37660.jpg



Pipe visible on LS slope.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	4.17	Rating **	M	Issue No.	958 (cont)	
LM End	4.17	Issue Type +	En	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR UCIP Field Study			37.897074 °	37.897074 °	
				-121.327926 °	-121.327926 °	
DWR ID	24049					
Comment Code						
Inspector Comment						
FS_ID:22069 DS_ID:24049 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: No permit identified for this crossing. FIELD_STRUCT_DESC: 2.25-inch polyvinyl chloride domestic water service line through the levee, 5 feet below the crown. Pump and tank on the waterside (WS) slope with a vent on the landside (LS) slope. FS Date: 8/23/2013						

Photo 2 of 2 : UCIP_FA_2018_22069_37659.jpg



Pipe, pump, and tank visible on WS slope.

LM Start	4.37	Rating **	M	Issue No.	959
LM End	4.37	Issue Type +	En	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			37.894453 °	37.894453 °
				-121.329232 °	-121.329232 °
DWR ID	20626				
Comment Code					
Inspector Comment					
FS_ID:18320 DS_ID:20626 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: Small leak in pipe on LS slope and pipe slightly crushed on LS toe. FIELD_STRUCT_DESC: 9-inch steel pipe of unknown purpose through the levee, 3 feet below the crown. Pump in drainage ditch on the landside (LS). Siphon breaker on the waterside (WS) slope. [Additional Reference(s): DWR Levee Log, 2004. USACE San Joaquin O&M Manual 7, April 1964, (HLM 4.42) 8-inch pipe listed]. FS Date: 8/23/2013					

Photo 1 of 3 : UCIP_FA_2018_18320_30594.jpg



Pipe and siphon breaker on WS slope.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	4.37	Rating **	M	Issue No.	959 (cont)	
LM End	4.37	Issue Type +	En	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR UCIP Field Study			37.894453 °	37.894453 °	
				-121.329232 °	-121.329232 °	
DWR ID	20626					
Comment Code						
Inspector Comment						
FS_ID:18320 DS_ID:20626 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: Small leak in pipe on LS slope and pipe slightly crushed on LS toe. FIELD_STRUCT_DESC: 9-inch steel pipe of unknown purpose through the levee, 3 feet below the crown. Pump in drainage ditch on the landside (LS). Siphon breaker on the waterside (WS) slope. [Additional Reference(s): DWR Levee Log, 2004. USACE San Joaquin O&M Manual 7, April 1964, (HLM 4.42) 8-inch pipe listed]. FS Date: 8/23/2013						

LM Start	4.37	Rating **	M	Issue No.	959 (cont)
LM End	4.37	Issue Type +	En	Location *	

Photo 2 of 3 : UCIP_FA_2018_18320_30593.jpg



Small leak in pipe on LS slope.

Photo 3 of 3 : UCIP_FA_2018_18320_30592.jpg



Pipe partially crushed at LS toe.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	4.37	Rating **	M	Issue No.	255
LM End	4.37	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			37.894442 °	37.894442 °
				-121.329238 °	-121.329238 °
DWR ID	DWR_RD0524_01_f_2017_255				
Comment Code					
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.					
Inspector Comment					
Multiple rodent holes around gate stop post.					

No Photos

LM Start	4.38	Rating **	M	Issue No.	111
LM End	4.38	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.894258 °	37.894258 °
				-121.329247 °	-121.329247 °
DWR ID	DWR_RD0524_01_s_2012_111				
Comment Code					
TR : Tree or limb					
Inspector Comment					
Dead tree at landside toe should be removed from levee toe.					

Photo 1 of 1 : FA_2018_RD0524_107_111_20180906_00174.jpg



Looking west at dead tree at landside toe.

LM Start	4.38	Rating **	M	Issue No.	165
LM End	4.38	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			37.894198 °	37.894198 °
				-121.329272 °	-121.329272 °
DWR ID	DWR_RD0524_01_s_2017_165				
Comment Code					
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.					
Inspector Comment					

No Photos

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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Levee Inspection Report By Mile - Fall 2018

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	4.40	Rating **	U	Issue No.	112 (cont)
LM End	4.52	Issue Type +	Ma	Location *	LS

A photograph showing a wide, light-colored gravel or sand path that curves from the foreground towards the left, leading to a body of water. The path is bordered on the right by dense, dark green foliage and trees. The sky is overcast with grey clouds. In the bottom right corner, there is an orange date stamp that reads "11-20-2017".

A large, dense green tree stands on a sandy dune next to a gravel path. The tree is the central focus, with its thick canopy casting a shadow on the sand. The gravel path is in the foreground, and the background shows more dunes and vegetation under a clear sky.

A large, dense, green shrub or small tree with many small, bright green leaves, growing on a sandy dune. The plant is the central focus of the image, with its base surrounded by sand. The background shows a clear blue sky and some distant trees.

* Location	** Rating	+ Issue Type
LS : Land Side N/A : Not Applicable	A : Acceptable N : Not Inspected/Rated	Ma : Maintenance Deficiency
WS : Water Side	M : Minimally Acceptable C : Corrected	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable A/W : Acceptable but Monitor & Maintain	En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	4.42	Rating **	M	Issue No.	199
LM End	4.42	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.893659 °	37.893659 °
				-121.329092 °	-121.329092 °
DWR ID	DWR_RD0524_01_f_2015_199				
Comment Code					
TR : Tree or limb					
Inspector Comment					
Remove dead tree from landside toe.					

Photo 1 of 1 : FA_2018_RD0524_107_199_20180906_00264.jpg



Looking west at dead tree on landward slope and toe fall 2015.

LM Start	4.52	Rating **	U	Issue No.	102
LM End	4.52	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.892383 °	37.892383 °
				-121.328194 °	-121.328194 °
DWR ID	DWR_RD0524_01_f_2016_102				
Comment Code					
TR : Tree or limb					
Inspector Comment					
Dead tree on waterside slope.					

Photo 1 of 2 : FA_2018_RD0524_107_102_20180906_00166.jpg



Looking southeast at dead tree on waterside slope fall 2015

LM Start	4.52	Rating **	U	Issue No.	102 (cont)
LM End	4.52	Issue Type +	Ma	Location *	WS

Photo 2 of 2 : FA_2018_RD0524_107_102_20180906_00167.jpg



Looking southeast at dead tree on waterside slope.

*** Location**

LS : Land Side N/A : Not Applicable
WS : Water Side
CR : Crown

**** Rating**

A : Acceptable N : Not Inspected/Rated
M : Minimally Acceptable C : Corrected
U : Unacceptable A/W : Acceptable but Monitor & Maintain

+ Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	4.53	Rating **	A/W	Issue No.	90
LM End	4.54	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR Erosion Survey			37.892230 °	37.892230 °
				-121.327930 °	-121.327930 °
DWR ID	RD0524U01RM45.07				
Comment Code					
Inspector Comment					
09/13/2017: No significant change observed.					
07/25/2016: No significant change observed.					
06/24/2015: No significant change observed.					
06/19/2014: No significant change observed.					
08/13/2013: No significant change observed.					
08/07/2012: The erosion is located at the inside of a river bend. Site is covered with broken concrete blocks and other debris. [2017 Site ID:RD0524U01RM45.07]					

LM Start	4.53	Rating **	A/W	Issue No.	90 (cont)
LM End	4.54	Issue Type +	Ma	Location *	WS

Photo 1 of 3 : FA_2018_RD0524_107_90_20180906_00152.jpg



Front view of the erosion site.

Photo 2 of 3 : FA_2018_RD0524_107_90_20180906_00153.jpg



Close view of the site.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	4.53	Rating **	A/W	Issue No.	90 (cont)
LM End	4.54	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR Erosion Survey			37.892230 °	37.892230 °
				-121.327930 °	-121.327930 °
DWR ID	RD0524U01RM45.07				
Comment Code					
Inspector Comment					
09/13/2017: No significant change observed.					
07/25/2016: No significant change observed.					
06/24/2015: No significant change observed.					
06/19/2014: No significant change observed.					
08/13/2013: No significant change observed.					
08/07/2012: The erosion is located at the inside of a river bend. Site is covered with broken concrete blocks and other debris. [2017 Site ID:RD0524U01RM45.07]					

Photo 3 of 3 : FA_2018_RD0524_107_90_20180906_00154.jpg



Front view of the site. Note the loosely placed concrete blocks at the site.

LM Start	4.53	Rating **	M	Issue No.	256
LM End	4.53	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.892231°	37.892231°
				-121.328179°	-121.328179°
DWR ID	DWR_RD0524_01_f_2017_256				
Comment Code					
PR : Prunings					
Inspector Comment					

No Photos

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	4.53	Rating **	A/W	Issue No.	235	
LM End		Issue Type +	Ma	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start		End
Item	2017 Storm Damage			37.892200 °		°
				-121.328000 °		°
DWR ID	DWR_RD0524_01_f _ 2017_235					
Comment Code						

Inspector Comment

Levee Evaluation Comments

Description: Slope protection repairs are needed along the waterside slope due to erosion. Based upon levee inspections, it was determined the waterside levee slopes were eroding, deteriorating and degrading in concave pocket sections at various locations along this levee reach. The eroded levee sections need to be restored back to design standards to prevent further deterioration of the damaged levee sections.

Site ID No: 468

Site Designation: LMA-295

Repair Type: Erosion

Rating: Serious

Field Date: 7/26/2017

Notes: Serious because erosion is impacting the levee, but there is some slope protection here. Slope is armored with asphalt and concrete rubble. The surrounding slopes are pretty barren, but there is a small bush within the site so it may be older.

LM Start	4.53	Rating **	A/W	Issue No.	235 (cont)
LM End		Issue Type +	Ma	Location *	

Photo 1 of 3 : LEVAL_FA_2018_468_2219.jpg



Photo 2 of 3 : LEVAL_FA_2018_468_2220.jpg



* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	4.53	Rating **	A/W	Issue No.	235 (cont)							
LM End		Issue Type +	Ma	Location *								
Category	Supplemental		GPS Latitude/Longitude									
			Start	End								
Item	2017 Storm Damage		37.892200 °	°								
			-121.328000 °	°								
DWR ID	DWR_RD0524_01_f_2017_235											
Comment Code												
Inspector Comment												
<p>Levee Evaluation Comments</p> <p>Description: Slope protection repairs are needed along the waterside slope due to erosion. Based upon levee inspections, it was determined the waterside levee slopes were eroding, deteriorating and degrading in concave pocket sections at various locations along this levee reach. The eroded levee sections need to be restored back to design standards to prevent further deterioration of the damaged levee sections.</p> <p>Site ID No: 468</p> <p>Site Designation: LMA-295</p> <p>Repair Type: Erosion</p> <p>Rating: Serious</p> <p>Field Date: 7/26/2017</p> <p>Notes: Serious because erosion is impacting the levee, but there is some slope protection here. Slope is armored with asphalt and concrete rubble. The surrounding slopes are pretty barren, but there is a small bush within the site so it may be older.</p>												

Photo 3 of 3 : LEVAL_FA_2018_468_2221.jpg



LM Start	4.56	Rating **	C	Issue No.	257							
LM End	4.56	Issue Type +	Ma	Location *	LS							
Category	Earthen Levee		GPS Latitude/Longitude									
			Start	End								
Item	Animal Control		37.891903 °	37.891903 °								
			-121.328264 °	-121.328264 °								
DWR ID	DWR_RD0524_01_f_2017_257											
Comment Code												
<p>A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.</p>												
Inspector Comment												
Backfilled rodent hole. But no rodent program visible.												

No Photos

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	4.57	Rating **	M	Issue No.	258
LM End	4.57	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.891778 °	37.891778 °
				-121.328342 °	-121.328342 °
DWR ID	DWR_RD0524_01_f_2017_258				
Comment Code					
PR : Prunings					
Inspector Comment					

Photo 1 of 1 : FA_2018_RD0524_107_258_20180906_00344.jpg



Looking west at the landside slope.

LM Start	4.60	Rating **	M	Issue No.	66
LM End	4.60	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.891365 °	37.891365 °
				-121.328633 °	-121.328633 °
DWR ID	DWR_RD0524_01_s_2012_66				
Comment Code					
GA : Garbage					
Inspector Comment					
Old farm equipment at landside toe.					

Photo 1 of 1 : FA_2018_RD0524_107_66_20180906_00115.jpg



Garbage at landward toe next to ramp at LM 4.64

LM Start	4.61	Rating **	U	Issue No.	63
LM End	4.61	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.891285 °	37.891285 °
				-121.328728 °	-121.328728 °
DWR ID	DWR_RD0524_01_s_2012_63				
Comment Code					
T1 : Trim trees to at least five feet above ground level.					
Inspector Comment					

Photo 1 of 1 : FA_2018_RD0524_107_63_20180906_00114.jpg



Looking south at dense trees on landside slope.

*** Location**

LS : Land Side N/A : Not Applicable
WS : Water Side
CR : Crown

**** Rating**

A : Acceptable N : Not Inspected/Rated
M : Minimally Acceptable C : Corrected
U : Unacceptable A/W : Acceptable but Monitor & Maintain

+ Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	4.63	Rating **	M	Issue No.	259							
LM End	4.63	Issue Type +	Ma	Location *	LS							
Category	Earthen Levee		GPS Latitude/Longitude									
			Start	End								
Item	Animal Control		37.890987°	37.890987°								
			-121.328956°	-121.328956°								
DWR ID	DWR_RD0524_01_f_2017_259											
Comment Code												
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.												
Inspector Comment												

No Photos

LM Start	4.63	Rating **	M	Issue No.	113							
LM End	4.63	Issue Type +	Ma	Location *	LS							
Category	Earthen Levee		GPS Latitude/Longitude									
			Start	End								
Item	Trim / Thin Trees		37.890973°	37.890973°								
			-121.328970°	-121.328970°								
DWR ID	DWR_RD0524_01_s_2012_113											
Comment Code												
T1 : Trim trees to at least five feet above ground level.												
Inspector Comment												

Photo 1 of 1 : FA_2018_RD0524_107_113_20180906_00178.jpg



Looking north at dense trees on landside slope.

*** Location**
 LS : Land Side N/A : Not Applicable
 WS : Water Side
 CR : Crown

**** Rating**
 A : Acceptable N : Not Inspected/Rated
 M : Minimally Acceptable C : Corrected
 U : Unacceptable A/W : Acceptable but Monitor & Maintain

+ Issue Type
 Ma : Maintenance Deficiency
 Ob : Design & System Obsolescence
 En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	4.68	Rating **	M	Issue No.	960
LM End	4.68	Issue Type +	En	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			37.890313 °	37.890313 °
				-121.329405 °	-121.329405 °
DWR ID	20646				
Comment Code					
Inspector Comment					
FS_ID:18323					
DS_ID:20646					
EP_NO: 0					
Repair Type: Non-Urgent					
Crossing Status: Found					
UCIP Comments: Good candidate for video inspection as brick and mortar deteriorating inside tunnel.					
FIELD_STRUCT_DESC: 22-inch concrete irrigation pipe through the levee, 12 feet below the crown. Pump on pier at the waterside (WS) toe. 16-inch pipe from pump discharges into a concrete riser unit inside the pump house on the WS shoulder. Brick and mortar channel on the landside (LS) toe. [Additional Reference(s): USACE San Joaquin O&M Manual 7, April 1964, (HLM 4.73) 14-inch pipe listed].					
FS Date: 8/23/2013					

LM Start	4.68	Rating **	M	Issue No.	960 (cont)
LM End	4.68	Issue Type +	En	Location *	

Photo 1 of 3 : UCIP_FA_2018_18323_30603.jpg



Brick and mortar channel on LS toe.

Photo 2 of 3 : UCIP_FA_2018_18323_30602.jpg



Pump on pier and slide gate house on WS shoulder.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	4.68	Rating **	M	Issue No.	960 (cont)	
LM End	4.68	Issue Type +	En	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR UCIP Field Study			37.890313 °	37.890313 °	
				-121.329405 °	-121.329405 °	
DWR ID	20646					
Comment Code						
Inspector Comment						
FS_ID:18323						
DS_ID:20646						
EP_NO: 0						
Repair Type: Non-Urgent						
Crossing Status: Found						
UCIP Comments: Good candidate for video inspection as brick and mortar deteriorating inside tunnel.						
FIELD_STRUCT_DESC: 22-inch concrete irrigation pipe through the levee, 12 feet below the crown. Pump on pier at the waterside (WS) toe. 16-inch pipe from pump discharges into a concrete riser unit inside the pump house on the WS shoulder. Brick and mortar channel on the landside (LS) toe. [Additional Reference(s): USACE San Joaquin O&M Manual 7, April 1964, (HLM 4.73) 14-inch pipe listed].						
FS Date: 8/23/2013						

Photo 3 of 3 : UCIP_FA_2018_18323_30601.jpg



Slide gate inside concrete riser within shed on WS shoulder.

LM Start	4.70	Rating **	U	Issue No.	67
LM End	4.70	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.890108 °	37.890108 °
				-121.329523 °	-121.329523 °
DWR ID	DWR_RD0524_01_s_2012_67				
Comment Code					
T1 : Trim trees to at least five feet above ground level.					
Inspector Comment					
Fig tree at landside toe.					

Photo 1 of 1 : FA_2018_RD0524_107_67_20180906_00116.jpg



Looking northwest at untrimmed tree on landward slope.

* Location
 LS : Land Side N/A : Not Applicable
 WS : Water Side
 CR : Crown

** Rating
 A : Acceptable N : Not Inspected/Rated
 M : Minimally Acceptable C : Corrected
 U : Unacceptable A/W : Acceptable but Monitor & Maintain

+ Issue Type
 Ma : Maintenance Deficiency
 Ob : Design & System Obsolescence
 En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	4.76	Rating **	A/W	Issue No.	236
LM End	4.76	Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	2017 Storm Damage			37.889300 °	37.889300 °
				-121.329800 °	-121.329800 °
DWR ID	DWR_RD0524_01_f_2017_236				
Comment Code					
Inspector Comment					
Levee Evaluation Comments					
Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.					
Site ID No:523					
Site Designation:LMA-429					
Repair Type: Erosion					
Rating:Area of Concern					
Field Date:8/15/2017					
Notes:					

Photo 1 of 3 : LEVAL_FA_2018_523_4217.jpg



LM Start	4.76	Rating **	A/W	Issue No.	236 (cont)
LM End	4.76	Issue Type +	Ma	Location *	

Photo 2 of 3 : LEVAL_FA_2018_523_4218.jpg



* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	4.76	Rating **	A/W	Issue No.	236 (cont)	
LM End	4.76	Issue Type +	Ma	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	2017 Storm Damage			37.889300 °	37.889300 °	
				-121.329800 °	-121.329800 °	
DWR ID	DWR_RD0524_01_f_2017_236					
Comment Code						
Inspector Comment						
Levee Evaluation Comments						
Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.						
Site ID No:523						
Site Designation:LMA-429						
Repair Type: Erosion						
Rating:Area of Concern						
Field Date:8/15/2017						
Notes:						

Photo 3 of 3 : LEVAL_FA_2018_523_4219.jpg



LM Start	4.89	Rating **	M	Issue No.	961	
LM End	4.89	Issue Type +	En	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start		End
Item	DWR UCIP Field Study			37.887694 °		37.887694 °
				-121.331019 °		-121.331019 °
DWR ID	20628					
Comment Code						
Inspector Comment						
FS_ID:22728						
DS_ID:20628						
EP_NO: 3817						
Repair Type: Non-Urgent						
Crossing Status: Found						
UCIP Comments: Appears abandoned and if so should be done so properly.						
FIELD_STRUCT_DESC: *ABANDONED* 6-inch steel drainage pipe through the levee, 3 feet below the crown. Pump 120 feet off the landside (LS) toe. Siphon breaker in 24-inch corrugated metal riser unit on the waterside (WS) shoulder. (Permit No. 3817, 1961 - Ohm and Saunders). [Additional Reference(s): DWR Levee Log, 2004. USACE San Joaquin O&M Manual 7, April 1964, (HLM 4.95)].						
FS Date: 8/23/2013						

Photo 1 of 3 : UCIP_FA_2018_22728_38453.jpg



Siphon breaker in 24-inch CMP riser on WS shoulder.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	4.89	Rating **	M	Issue No.	961 (cont)	
LM End	4.89	Issue Type +	En	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR UCIP Field Study			37.887694 °	37.887694 °	
				-121.331019 °	-121.331019 °	
DWR ID	20628					
Comment Code						
Inspector Comment						
FS_ID:22728 DS_ID:20628 EP_NO: 3817 Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: Appears abandoned and if so should be done so properly. FIELD_STRUCT_DESC: *ABANDONED* 6-inch steel drainage pipe through the levee, 3 feet below the crown. Pump 120 feet off the landside (LS) toe. Siphon breaker in 24-inch corrugated metal riser unit on the waterside (WS) shoulder. (Permit No. 3817, 1961 - Ohm and Saunders). [Additional Reference(s): DWR Levee Log, 2004. USACE San Joaquin O&M Manual 7, April 1964, (HLM 4.95)]. FS Date: 8/23/2013						

LM Start	4.89	Rating **	M	Issue No.	961 (cont)
LM End	4.89	Issue Type +	En	Location *	

Photo 2 of 3 : UCIP_FA_2018_22728_38452.jpg



Pipe visible on WS toe.

Photo 3 of 3 : UCIP_FA_2018_22728_38451.jpg



Pump in pumphouse 120-feet off LS toe.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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Reclamation District No. 0524 Middle Roberts Island

Looking west at untrimmed tree on landward slope.

No Photos

Looking southwest at the landside slope.

Page 170 of 198

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	5.12	Rating **	U	Issue No.	266
LM End	5.16	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.884608 °	37.884023 °
				-121.332153 °	-121.332100 °
DWR ID	DWR_RD0524_01_f_2017_266				
Comment Code					
T1 : Trim trees to at least five feet above ground level.					
Inspector Comment					

Photo 1 of 1 : FA_2018_RD0524_107_266_20180906_00355.jpg



Looking south at the landside slope.

LM Start	5.19	Rating **	M	Issue No.	115
LM End	5.19	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			37.883587 °	37.883587 °
				-121.332100 °	-121.332100 °
DWR ID	DWR_RD0524_01_s_2012_115				
Comment Code					
S3 : Repair the levee slope damaged by vehicle traffic and prevent access where possible.					
Inspector Comment					
Vehicle traffic created a ramp on landside slope.					

Photo 1 of 1 : FA_2018_RD0524_107_115_20180906_00180.jpg



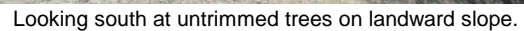
Looking northwest at slope damage on landward slope.

LM Start	5.22	Rating **	M	Issue No.	116
LM End	5.22	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.883170 °	37.883170 °
				-121.332227 °	-121.332227 °
DWR ID	DWR_RD0524_01_s_2012_116				
Comment Code					
TR : Tree or limb					
Inspector Comment					
Dead tree limbs on waterside slope.					

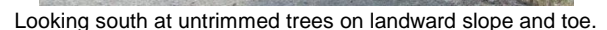
No Photos

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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Reclamation District No. 0524 Middle Roberts Island



No Photos



**Flood Control Project Maintenance
Levee Inspections**

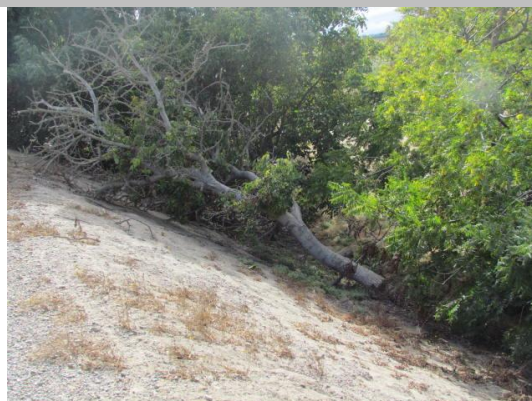
Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	5.39	Rating **	M	Issue No.	178
LM End	5.39	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.880806 °	37.880806 °
				-121.332833 °	-121.332833 °
DWR ID	DWR_RD0524_01_f_2014_178				
Comment Code					
TR : Tree or limb					
Inspector Comment					
Downed tree on landside toe.					

Photo 1 of 1 : FA_2018_RD0524_107_178_20180906_00234.jpg



Looking south at downed tree on landward slope.

LM Start	5.41	Rating **	U	Issue No.	962	
LM End	5.41	Issue Type +	Ma	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start		End
Item	DWR UCIP LMA Responsibility			37.880584 °	37.880584 °	
				-121.332901 °	-121.332901 °	
DWR ID	20630					
Comment Code						
Inspector Comment						
FS_ID:53358						
DS_ID:20630						
EP_NO: N/A						
Repair Type: Urgent						
Crossing Status: Found						
UCIP Comments: 10/2/2018 Same as last inspection. Holes present in pipe pose a potential threat to levee's internal integrity. Recommend video inspection (D. Sanoski - DWR UCIP).11/16/2016 same as previous inspection hole in pipe is still present on WS near toe. This pipe does not appear to be in use. Need to contact owner to determine status of crossing. If the crossing is abandoned or still in use, owner will need to coordinate with the CVFPB to comply with Title 23 requirements. (O. Magana - DWR UCIP)08/23/2013 flap gate damage and does not work at WS toe. Large hole in pipe at WS toe. Pipe appears abandoned and should be done so properly. (W. Wylie - DWR UCIP)						
FIELD_STRUCT_DESC: *ABANDONED* 1 of 2: 12-inch steel irrigation pipe through the levee, 6 feet below the crown. Pump located on the waterside (WS), no pump found in 2013. Flap gate located on the WS end. [Additional Reference(s): DWR Levee Log, 2004. USACE San Joaquin O&M Manual 7, April 1964, (HLM 5.48) 10-inch pipe listed, Drawing No. 07-04-1490, Sheet 1490/4, (Station 8+01.3)].						
FS Date: 10/2/2018 1:34:00 PM						

Photo 1 of 3 : UCIP_FA_2018_53358_30689.jpg



Pipe visible on WS slope.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	5.41	Rating **	U	Issue No.	962 (cont)
LM End	5.41	Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP LMA Responsibility			37.880584 °	37.880584 °
				-121.332901 °	-121.332901 °
DWR ID	20630				

Comment Code

Inspector Comment

FS_ID:53358

DS_ID:20630

EP_NO: N/A

Repair Type: Urgent

Crossing Status: Found

UCIP Comments: 10/2/2018 Same as last inspection. Holes present in pipe pose a potential threat to levee's internal integrity. Recommend video inspection (D. Sanoski - DWR UCIP). 11/16/2016 same as previous inspection hole in pipe is still present on WS near toe. This pipe does not appear to be in use. Need to contact owner to determine status of crossing. If the crossing is abandoned or still in use, owner will need to coordinate with the CVFPB to comply with Title 23 requirements. (O. Magana - DWR UCIP) 08/23/2013 flap gate damage and does not work at WS toe. Large hole in pipe at WS toe. Pipe appears abandoned and should be done so properly. (W. Wylie - DWR UCIP)

FIELD_STRUCT_DESC: *ABANDONED* 1 of 2: 12-inch steel irrigation pipe through the levee, 6 feet below the crown. Pump located on the waterside (WS), no pump found in 2013. Flap gate located on the WS end. [Additional Reference(s): DWR Levee Log, 2004. USACE San Joaquin O&M Manual 7, April 1964, (HLM 5.48) 10-inch pipe listed, Drawing No. 07-04-1490, Sheet 1490/4, (Station 8+01.3)].

FS Date: 10/2/2018 1:34:00 PM

LM Start	5.41	Rating **	U	Issue No.	962 (cont)
LM End	5.41	Issue Type +	Ma	Location *	

Photo 2 of 3 : UCIP_FA_2018_53358_30688.jpg



Vent on pipe on WS slope. Possible slurry standpipe that has not yet been used.

Photo 3 of 3 : UCIP_FA_2018_53358_30687.jpg



Broken flap gate at WS toe.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable N : Not Inspected/Rated M : Minimally Acceptable C : Corrected U : Unacceptable A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	5.41	Rating **	M	Issue No.	269
LM End	5.41	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.880468 °	37.880468 °
				-121.332909 °	-121.332909 °
DWR ID	DWR_RD0524_01_f_2017_269				
Comment Code					
TR : Tree or limb					
Inspector Comment					

Photo 1 of 1 : FA_2018_RD0524_107_269_20180906_00357.jpg



Looking west at the landside slope.

LM Start	5.42	Rating **	M	Issue No.	963	
LM End	5.42	Issue Type +	Ma	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR UCIP LMA Responsibility			37.880358 °	37.880358 °	
				-121.332972 °	-121.332972 °	
DWR ID	20631					
Comment Code						
Inspector Comment						
FS_ID:18348						
DS_ID:20631						
EP_NO: N/A						
Repair Type: Non-Urgent						
Crossing Status: Found						
UCIP Comments: Recent work being done on WS slope. Pipe may still be in use.						
FIELD_STRUCT_DESC: 10-inch steel drainage pipe through the levee, 6 feet below the crown. Pump not found on the landside (LS).						
[Additional Reference(s): DWR Levee Log, 2004. USACE San Joaquin O&M Manual 7, April 1964, (HLM 5.50)].						
FS Date: 8/23/2013						

Photo 1 of 3 : UCIP_FA_2018_18348_30706.jpg



10-inch pipe debris on the WS slope.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	5.42	Rating **	M	Issue No.	963 (cont)	
LM End	5.42	Issue Type +	Ma	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR UCIP LMA Responsibility			37.880358 °	37.880358 °	
				-121.332972 °	-121.332972 °	
DWR ID	20631					
Comment Code						
Inspector Comment						
FS_ID:18348						
DS_ID:20631						
EP_NO: N/A						
Repair Type: Non-Urgent						
Crossing Status: Found						
UCIP Comments: Recent work being done on WS slope. Pipe may still be in use.						
FIELD_STRUCT_DESC: 10-inch steel drainage pipe through the levee, 6 feet below the crown. Pump not found on the landside (LS).						
[Additional Reference(s): DWR Levee Log, 2004. USACE San Joaquin O&M Manual 7, April 1964, (HLM 5.50)].						
FS Date: 8/23/2013						

LM Start	5.42	Rating **	M	Issue No.	963 (cont)
LM End	5.42	Issue Type +	Ma	Location *	

Photo 2 of 3 : UCIP_FA_2018_18348_30705.jpg



8-inch pipe sleeved through 10-inch pipe with vent on WS slope.

Photo 3 of 3 : UCIP_FA_2018_18348_30704.jpg



No flap gate on end of pipe at WS toe.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	5.42	Rating **	C	Issue No.	118
LM End	5.42	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			37.880323 °	37.880323 °
				-121.332968 °	-121.332968 °
DWR ID	DWR_RD0524_01_s_2012_118				
Comment Code					
S1 : Repair slope instability.					
Inspector Comment					
Slope damage caused by human activity.					

No Photos

LM Start	5.44	Rating **	U	Issue No.	73
LM End	5.44	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.880085 °	37.880085 °
				-121.333045 °	-121.333045 °
DWR ID	DWR_RD0524_01_s_2012_73				
Comment Code					
T1 : Trim trees to at least five feet above ground level.					
Inspector Comment					
Untrimmed trees on landside slope.					

Photo 1 of 1 : FA_2018_RD0524_107_73_20180906_00127.jpg



Looking southwest at large untrimmed tree on landward slope.

* Location
LS : Land Side N/A : Not Applicable
WS : Water Side
CR : Crown

** Rating
A : Acceptable N : Not Inspected/Rated
M : Minimally Acceptable C : Corrected
U : Unacceptable A/W : Acceptable but Monitor & Maintain

+ Issue Type
Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	5.53	Rating **	M	Issue No.	92
LM End	5.53	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR Erosion Survey			37.878920 °	37.878920 °
				-121.332670 °	-121.332670 °
DWR ID	RD0524U01RM46.06				
Comment Code					
Inspector Comment					
09/13/2017: No significant change observed.					
07/25/2016: No significant change observed.					
06/24/2015: No significant change observed.					
06/19/2014: No significant change observed.					
08/13/2013: Larger trees are at the levee shoulder, and an irrigation pump station is next to the erosion site. [2017 Site ID:RD0524U01RM46.06]					

LM Start	5.53	Rating **	M	Issue No.	92 (cont)
LM End	5.53	Issue Type +	Ma	Location *	WS

Photo 1 of 2 : FA_2018_RD0524_107_92_20180906_00155.jpg



Front view of the erosion.

Photo 2 of 2 : FA_2018_RD0524_107_92_20180906_00156.jpg



Close view of the site.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	5.56	Rating **	U	Issue No.	166
LM End	5.56	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.878333 °	37.878333 °
				-121.332875 °	-121.332875 °
DWR ID	DWR_RD0524_01_s_2017_166				
Comment Code					
AT : Agricultural tilling					
Inspector Comment					
Damaged landside toe appears to be caused by farming activity.					

Photo 1 of 2 : FA_2018_RD0524_107_166_20180906_00216.jpg



Looking northeast at cut into landward toe.

LM Start	5.56	Rating **	U	Issue No.	166 (cont)
LM End	5.56	Issue Type +	En	Location *	LS

Photo 2 of 2 : FA_2018_RD0524_107_166_20180906_00217.jpg



Looking at north at damage to landward toe.

LM Start	5.58	Rating **	C	Issue No.	167
LM End	5.58	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			37.878115 °	37.878115 °
				-121.332763 °	-121.332763 °
DWR ID	DWR_RD0524_01_s_2017_167				
Comment Code					
S3 : Repair the levee slope damaged by vehicle traffic and prevent access where possible.					
Inspector Comment					
Slope damage caused by vehicle traffic.					

No Photos

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	5.63	Rating **	C	Issue No.	168
LM End	5.63	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			37.877527°	37.877527°
				-121.332385°	-121.332385°
DWR ID	DWR_RD0524_01_s_2017_168				
Comment Code					
S3 : Repair the levee slope damaged by vehicle traffic and prevent access where possible.					
Inspector Comment					
Slope damage on landside slope.					

No Photos

LM Start	5.64	Rating **	C	Issue No.	215
LM End	5.64	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			37.877378 °	37.877378 °
				-121.332343 °	-121.332343 °
DWR ID	DWR_RD0524_01_s_2016_215				
Comment Code					
S1 : Repair slope instability.					
Inspector Comment					
Levee slope damage is due vehicle traffic and foot traffic. Vehicle traffic created a ramp on landside slope.					

No Photos

LM Start	5.64	Rating **	C	Issue No.	69
LM End	5.80	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			37.877298 °	37.875073 °
				-121.332343 °	-121.333168 °
DWR ID	DWR_RD0524_01_s_2012_69				
Comment Code					
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.					
Inspector Comment					
District has grouted rodent holes, but rodents are still present. District backfilled rodent holes no visible rodent program.					

No Photos

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable		N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	5.64	Rating **	M	Issue No.	117
LM End	5.64	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.877272°	37.877272°
				-121.332400°	-121.332400°
DWR ID	DWR_RD0524_01_f_2013_117				
Comment Code					
T1 : Trim trees to at least five feet above ground level.					
Inspector Comment					

Photo 1 of 1 : FA_2018_RD0524_107_117_20180906_00181.jpg



Looking northwest at untrimmed tree on landward slope.

LM Start	5.70	Rating **	U	Issue No.	175
LM End	5.70	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.876417 °	37.876417 °
				-121.332505 °	-121.332505 °
DWR ID	DWR_RD0524_01_s_2017_175				
Comment Code					
PR : Prunings					
Inspector Comment					

Photo 1 of 2 : FA_2018_RD0524_107_175_20180906_00229.jpg



Looking southwest at the landside slope.

LM Start	5.70	Rating **	U	Issue No.	175 (cont)
LM End	5.70	Issue Type +	En	Location *	LS

Photo 2 of 2 : FA_2018_RD0524_107_175_20180906_00230.jpg



Looking south at large pruning pile at landward toe.

*** Location**
LS : Land Side N/A : Not Applicable
WS : Water Side
CR : Crown

**** Rating**
A : Acceptable N : Not Inspected/Rated
M : Minimally Acceptable C : Corrected
U : Unacceptable A/W : Acceptable but Monitor & Maintain

+ Issue Type
Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	5.74	Rating **	M	Issue No.	964	
LM End	5.74	Issue Type +	En	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR UCIP Field Study			37.876001 °	37.876001 °	
				-121.332725 °	-121.332725 °	
DWR ID	20649					
Comment Code						
Inspector Comment						
FS_ID:18364 DS_ID:20649 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: Abandoned and should be done so properly. FIELD_STRUCT_DESC: 2.25-inch steel conduit for a 1-inch plastic electrical conduit through the levee, 0.25 feet below the crown. Lines exposed on both slopes. [Additional Reference(s): DWR Levee Log, 2004]. FS Date: 8/23/2013						

Photo 1 of 2 : UCIP_FA_2018_18364_30761.jpg



Steel conduit and electrical conduit visible on the LS shoulder.

LM Start	5.74	Rating **	M	Issue No.	964 (cont)
LM End	5.74	Issue Type +	En	Location *	

Photo 2 of 2 : UCIP_FA_2018_18364_30760.jpg



Steel conduit and electrical conduit visible on the WS shoulder.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	5.74	Rating **	M	Issue No.	965	
LM End	5.74	Issue Type +	En	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR UCIP Field Study			37.876001 °	37.876001 °	
				-121.332725 °	-121.332725 °	
DWR ID	20635					
Comment Code						
Inspector Comment						
FS_ID:40793 DS_ID:20635 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Indicator Found UCIP Comments: Appears abandoned and if so should be done so properly. No permit identified for this crossing. FIELD_STRUCT_DESC: *ABANDONED* 1-inch steel water line through the levee, 1 foot below the crown. Pipe visible only on the landside (LS) shoulder. FS Date: 8/23/2013						

Photo 1 of 1 : UCIP_FA_2018_40793_30781.jpg



Steel waterline visible on LS shoulder.

LM Start	5.76	Rating **	A/W	Issue No.	271
LM End	5.76	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			37.875631 °	37.875631 °
				-121.332907 °	-121.332907 °
DWR ID	DWR_RD0524_01_f _ 2017_271				
Comment Code					
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.					
Inspector Comment					

Photo 1 of 1 : FA_2018_RD0524_107_271_20180906_00358.jpg



Looking east at the waterside slope.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	5.77	Rating **	U	Issue No.	181
LM End	5.77	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.875545 °	37.875545 °
				-121.332952 °	-121.332952 °
DWR ID	DWR_RD0524_01_s_2017_181				
Comment Code					
BU : Building					
Inspector Comment					
Animal kennels at landside toe.					

Photo 1 of 1 : FA_2018_RD0524_107_181_20180906_00239.jpg



Looking west at animal pen at landward toe.

LM Start	5.77	Rating **	A/W	Issue No.	197
LM End	5.79	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			37.875545 °	37.875310 °
				-121.332952 °	-121.333065 °
DWR ID	DWR_RD0524_01_s_2015_197				
Comment Code					
A1 : Exterminate rodents and backfill and compact or grout burrows.					
Inspector Comment					
Several rodent holes on landside slope and levee crown. Backfilled hole but no rodent program visible.					

Photo 1 of 2 : FA_2018_RD0524_107_197_20180906_00259.jpg



Looking north at typical view of rodent holes on landward slope.

LM Start	5.77	Rating **	A/W	Issue No.	197 (cont)
LM End	5.79	Issue Type +	Ma	Location *	LS

Photo 2 of 2 : FA_2018_RD0524_107_197_20180906_00260.jpg



Looking southwest at typical view of rodent hole at landward shoulder.

*** Location**

LS : Land Side N/A : Not Applicable
WS : Water Side
CR : Crown

**** Rating**

A : Acceptable N : Not Inspected/Rated
M : Minimally Acceptable C : Corrected
U : Unacceptable A/W : Acceptable but Monitor & Maintain

+ Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	5.79	Rating **	A/W	Issue No.	267
LM End	5.79	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.875328 °	37.875328 °
				-121.333050 °	-121.333050 °
DWR ID	DWR_RD0524_01_s_2012_267				
Comment Code					
PR : Prunings					
Inspector Comment					
Prunings at landside toe should be burned or removed.					

Photo 1 of 1 : FA_2018_RD0524_107_267_20180906_00356.jpg



Looking west at prunings at landward toe.

LM Start	5.81	Rating **	M	Issue No.	966	
LM End	5.81	Issue Type +	En	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start		End
Item	DWR UCIP Field Study			37.874972 °	37.874972 °	
				-121.333246 °	-121.333246 °	
DWR ID	20636					
Comment Code						
Inspector Comment						
FS_ID:18369						
DS_ID:20636						
EP_NO: N/A						
Repair Type: Non-Urgent						
Crossing Status: Found						
UCIP Comments: Apparent leak on WS shoulder at concrete riser.						
Erosion under pipe. This may have been fixed when the pipe was sleeved with a PVC liner.						
FIELD_STRUCT_DESC: 10-inch steel drainage pipe through the levee, 5 feet below the crown. Pump on the landside (LS). Siphon breaker in a 36-inch concrete riser unit on the waterside (WS) shoulder. Power pole at the LS toe. Polyvinyl chloride liner sleeved inside steel pipe.						
[Additional Reference(s): DWR Levee Log, 2004. USACE San Joaquin O&M Manual 7, April 1964, (HLM 5.88)].						
FS Date: 8/23/2013						

Photo 1 of 2 : UCIP_FA_2018_18369_30785.jpg



Concrete standpipe over pipe on WS shoulder.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	5.81	Rating **	M	Issue No.	966 (cont)	
LM End	5.81	Issue Type +	En	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start		End
Item	DWR UCIP Field Study			37.874972 °		37.874972 °
				-121.333246 °		-121.333246 °
DWR ID	20636					
Comment Code						
Inspector Comment						
FS_ID:18369						
DS_ID:20636						
EP_NO: N/A						
Repair Type: Non-Urgent						
Crossing Status: Found						
UCIP Comments: Apparent leak on WS shoulder at concrete riser.						
Erosion under pipe. This may have been fixed when the pipe was sleeved with a PVC liner.						
FIELD_STRUCT_DESC: 10-inch steel drainage pipe through the levee, 5 feet below the crown. Pump on the landside (LS). Siphon breaker in a 36-inch concrete riser unit on the waterside (WS) shoulder. Power pole at the LS toe. Polyvinyl chloride liner sleeved inside steel pipe.						
[Additional Reference(s): DWR Levee Log, 2004. USACE San Joaquin O&M Manual 7, April 1964, (HLM 5.88)].						
FS Date: 8/23/2013						

Photo 2 of 2 : UCIP_FA_2018_18369_30784.jpg



Pipe, pump, power pole, and meter off LS toe.

LM Start	5.81	Rating **	C	Issue No.	183
LM End	5.81	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			37.874973 °	37.874973 °
				-121.333227 °	-121.333227 °
DWR ID	DWR_RD0524_01_s_2017_183				
Comment Code					
E2 : Schedule repair of erosion site prior to the next inspection.					
Inspector Comment					
Bank caving on waterside around pipe structure.					

No Photos

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	5.82	Rating **	M	Issue No.	967
LM End	5.82	Issue Type +	En	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			37.874829 °	37.874829 °
				-121.333265 °	-121.333265 °
DWR ID	20656				
Comment Code					
Inspector Comment					
FS_ID:18705 DS_ID:20656 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Indicator Found UCIP Comments: Need to verify gasline exists and if so improve signage. FIELD_STRUCT_DESC: Gas line marker sign on the waterside (WS) shoulder. FS Date: 8/23/2013					

Photo 1 of 1 : UCIP_FA_2018_18705_31249.jpg



Gasline marker on WS shoulder.

LM Start	5.86	Rating **	U	Issue No.	93
LM End	5.86	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR Erosion Survey			37.874370 °	37.874370 °
				-121.332850 °	-121.332850 °
DWR ID	RD0524U01RM46.39				
Comment Code					
Inspector Comment					
09/13/2017: No significant change observed.					
07/25/2016: No significant change observed.					
06/24/2015: No significant change observed.					
06/19/2014: No significant change observed.					
08/13/2013: No significant change observed.					
08/07/2012: The erosion is near a water-intake structure. Pipe leakage likely caused the erosion. [2017 Site ID:RD0524U01RM46.39]					

Photo 1 of 2 : FA_2018_RD0524_107_93_20180906_00157.jpg



Front view of the site.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	5.86	Rating **	U	Issue No.	93 (cont)
LM End	5.86	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR Erosion Survey			37.874370 °	37.874370 °
				-121.332850 °	-121.332850 °
DWR ID	RD0524U01RM46.39				
Comment Code					
Inspector Comment					
09/13/2017: No significant change observed.					
07/25/2016: No significant change observed.					
06/24/2015: No significant change observed.					
06/19/2014: No significant change observed.					
08/13/2013: No significant change observed.					
08/07/2012: The erosion is near a water-intake structure. Pipe leakage likely caused the erosion. [2017 Site ID:RD0524U01RM46.39]					

Photo 2 of 2 : FA_2018_RD0524_107_93_20180906_00158.jpg



View of the erosion.

LM Start	5.86	Rating **	M	Issue No.	75
LM End	5.88	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			37.874240 °	37.874002 °
				-121.333187 °	-121.333027 °
DWR ID	DWR_RD0524_01_s_2012_75				
Comment Code					
A1 : Exterminate rodents and backfill and compact or grout burrows.					
Inspector Comment					
District has grouted rodent holes, but other rodent holes have appeared. Active rodents in area.					

Photo 1 of 2 : FA_2018_RD0524_107_75_20180906_00131.jpg



Looking southwest at typical rodent holes on waterward slope.

* Location
LS : Land Side N/A : Not Applicable
WS : Water Side
CR : Crown

** Rating
A : Acceptable N : Not Inspected/Rated
M : Minimally Acceptable C : Corrected
U : Unacceptable A/W : Acceptable but Monitor & Maintain

+ Issue Type
Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	5.86	Rating **	M	Issue No.	75 (cont)	
LM End	5.88	Issue Type +	Ma	Location *	WS	
Category	Earthen Levee			GPS Latitude/Longitude		
				Start		End
Item	Animal Control			37.874240 °		37.874002 °
				-121.333187 °		-121.333027 °
DWR ID	DWR_RD0524_01_s_2012_75					
Comment Code						
A1 : Exterminate rodents and backfill and compact or grout burrows.						
Inspector Comment						
District has grouted rodent holes, but other rodent holes have appeared. Active rodents in area.						

Photo 2 of 2 : FA_2018_RD0524_107_75_20180906_00132.jpg



Looking typical view of several rodent holes on landward slope and toe.

LM Start	5.87	Rating **	C	Issue No.	74
LM End	5.87	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			37.874202 °	37.874086 °
				-121.333197 °	-121.333153 °
DWR ID	DWR_RD0524_01_s_2012_74				
Comment Code					
E1 : Note and monitor erosion site.					
Inspector Comment					
Erosion on landside slope around intake pipe.					

No Photos

LM Start	5.87	Rating **	M	Issue No.	273
LM End	5.87	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			37.874196 °	37.874196 °
				-121.333195 °	-121.333195 °
DWR ID	DWR_RD0524_01_f_2017_273				
Comment Code					
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.					
Inspector Comment					

No Photos

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	5.87	Rating **	M	Issue No.	968
LM End	5.87	Issue Type +	En	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			37.874194 °	37.874194 °
				-121.333182 °	-121.333182 °
DWR ID	20638				
Comment Code					
Inspector Comment					
FS_ID:18379 DS_ID:20638 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: Heavy erosion around pipe upstream of standpipe on LS slope. Verify pipe is not leaking and repair erosion on LS slope. FIELD_STRUCT_DESC: 12-inch steel irrigation pipe through the levee, 10 feet below the crown. Slant pump on pier at the waterside (WS) toe. 10-inch steel standpipe on the landside (LS) slope. 42-inch concrete standpipe on the LS slope. Filter plant and power pole on the LS toe. 1.5-inch galvanized iron electrical conduit at same location. [Additional Reference(s): DWR Levee Log, 2004. USACE San Joaquin O&M Manual 7, April 1964, (HLM 5.93)]. FS Date: 8/23/2013					

LM Start	5.87	Rating **	M	Issue No.	968 (cont)
LM End	5.87	Issue Type +	En	Location *	

Photo 1 of 3 : UCIP_FA_2018_18379_30829.jpg



Butterfly valves and standpipes on LS slope along with electrical conduit.

Photo 2 of 3 : UCIP_FA_2018_18379_30828.jpg



Slant pump on WS toe.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	5.87	Rating **	M	Issue No.	968 (cont)	
LM End	5.87	Issue Type +	En	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start		End
Item	DWR UCIP Field Study			37.874194 °		37.874194 °
				-121.333182 °		-121.333182 °
DWR ID	20638					
Comment Code						
Inspector Comment						
FS_ID:18379						
DS_ID:20638						
EP_NO: N/A						
Repair Type: Non-Urgent						
Crossing Status: Found						
UCIP Comments: Heavy erosion around pipe upstream of standpipe on LS slope. Verify pipe is not leaking and repair erosion on LS slope.						
FIELD_STRUCT_DESC: 12-inch steel irrigation pipe through the levee, 10 feet below the crown. Slant pump on pier at the waterside (WS) toe.						
10-inch steel standpipe on the landside (LS) slope. 42-inch concrete standpipe on the LS slope. Filter plant and power pole on the LS toe.						
1.5-inch galvanized iron electrical conduit at same location. [Additional Reference(s): DWR Levee Log, 2004. USACE San Joaquin O&M Manual 7, April 1964, (HLM 5.93)].						
FS Date: 8/23/2013						

Photo 3 of 3 : UCIP_FA_2018_18379_30827.jpg



Filter pump on LS toe.

LM Start	5.87	Rating **	M	Issue No.	98
LM End	5.87	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.874085 °	37.874085 °
				-121.333154 °	-121.333154 °
DWR ID	DWR_RD0524_01_s_2012_98				
Comment Code					
T1 : Trim trees to at least five feet above ground level.					
Inspector Comment					
Untrimmed walnut tree on landside slope.					

Photo 1 of 1 : FA_2018_RD0524_107_98_20180906_00164.jpg



Looking west at walnut tree on landward slope.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	5.89	Rating **	C	Issue No.	119
LM End	5.89	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			37.873893°	37.873893°
				-121.332978°	-121.332978°
DWR ID	DWR_RD0524_01_s_2012_119				
Comment Code					
S3 : Repair the levee slope damaged by vehicle traffic and prevent access where possible.					
Inspector Comment					
Landowner is using damaged area as a ramp.					

No Photos

LM Start	5.92	Rating **	U	Issue No.	200
LM End	5.92	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.873623 °	37.873623 °
				-121.332585 °	-121.332585 °
DWR ID	DWR_RD0524_01_f_2015_200				
Comment Code					
V6 : Landscaping					
Inspector Comment					
Oleander bush on landside slope.					

Photo 1 of 1 : FA_2018_RD0524_107_200_20180906_00265.jpg



Looking south at oleander on landward slope fall 2015.

LM Start	5.94	Rating **	M	Issue No.	87
LM End	5.95	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.873545 °	37.873445 °
				-121.332308 °	-121.332127 °
DWR ID	DWR_RD0524_01_s_2012_87				
Comment Code					
FE : Fence					
Inspector Comment					

No Photos

* Location
LS : Land Side N/A : Not Applicable
WS : Water Side
CR : Crown

** Rating
A : Acceptable N : Not Inspected/Rated
M : Minimally Acceptable C : Corrected
U : Unacceptable A/W : Acceptable but Monitor & Maintain

+ Issue Type
Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	5.94	Rating **	U	Issue No.	88
LM End	5.95	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.873543 °	37.873445 °
				-121.332308 °	-121.332127 °
DWR ID	DWR_RD0524_01_s_2012_88				
Comment Code					
V6 : Landscaping					
Inspector Comment					
Cactus and Century plants on landside slope and toe.					

Photo 1 of 1 : FA_2018_RD0524_107_88_20180906_00151.jpg



Looking southeast at fence and cactus on landside slope and toe.

LM Start	5.96	Rating **	U	Issue No.	120
LM End	5.96	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.873347 °	37.873347 °
				-121.332028 °	-121.332028 °
DWR ID	DWR_RD0524_01_s_2012_120				
Comment Code					
V6 : Landscaping					
Inspector Comment					
Trim trees up 5-feet off ground for visibility.					

Photo 1 of 1 : FA_2018_RD0524_107_120_20180906_00187.jpg



Looking south at untrimmed trees on landward slope and toe.

LM Start	6.00	Rating **	M	Issue No.	274
LM End	6.00	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.872993 °	37.872993 °
				-121.331295 °	-121.331295 °
DWR ID	DWR_RD0524_01_f_2017_274				
Comment Code					
BU : Building					
Inspector Comment					
Chicken coops at landside toe.					

No Photos

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	6.02	Rating **	M	Issue No.	191
LM End	6.02	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.872844 °	37.872844 °
				-121.331070 °	-121.331070 °
DWR ID	DWR_RD0524_01_s_2014_191				
Comment Code					
V6 : Landscaping					
Inspector Comment					
Cactus at landside toe.					

No Photos

LM Start	6.08	Rating **	M	Issue No.	272
LM End	6.08	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			37.872121 °	37.872121 °
				-121.330568 °	-121.330568 °
DWR ID	DWR_RD0524_01_f_2017_272				
Comment Code					
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.					
Inspector Comment					

No Photos

LM Start	6.08	Rating **	M	Issue No.	147
LM End	6.08	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			37.872017 °	37.872017 °
				-121.330487 °	-121.330487 °
DWR ID	DWR_RD0524_01_f_2018_147				
Comment Code					
E1 : Note and monitor erosion site.					
Inspector Comment					
Erosion around and near pipe on landward slope.					

Photo 1 of 1 : FA_2018_RD0524_107_147_20180919_00481.jpg



Looking at landward erosion. (Fall 2018)

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	6.15	Rating **	M	Issue No.	969
LM End	6.15	Issue Type +	En	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			37.871138 °	37.871138 °
				-121.330146 °	-121.330146 °
DWR ID	20641				
Comment Code					
Inspector Comment					
FS_ID:18392					
DS_ID:20641					
EP_NO: N/A					
Repair Type: Non-Urgent					
Crossing Status: Found					
UCIP Comments: Pipe and pump abandoned and should be done so properly.					
FIELD_STRUCT_DESC: *ABANDONED* 10-inch irrigation pipe of an unknown material through the levee, 12 feet below the crown. Pump on the waterside (WS) slope. [Additional Reference(s): DWR Levee Log, 2004. USACE San Joaquin O&M Manual 7, April 1964, (HLM 6.22)].					
FS Date: 8/23/2013					

Photo 1 of 2 : UCIP_FA_2018_18392_30910.jpg



Pump and open pipe visible on WS slope.

LM Start	6.15	Rating **	M	Issue No.	969 (cont)
LM End	6.15	Issue Type +	En	Location *	

Photo 2 of 2 : UCIP_FA_2018_18392_30909.jpg



Pipe and concrete standpipe visible on LS toe.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	6.15	Rating **	M	Issue No.	970
LM End	6.15	Issue Type +	En	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			37.871118 °	37.871118 °
				-121.330137 °	-121.330137 °
DWR ID	24052				
Comment Code					
Inspector Comment					
FS_ID:22073 DS_ID:24052 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: Abandoned and should be done so properly. FIELD_STRUCT_DESC: *ABANDONED* 1.75-inch galvanized iron electrical conduit through the levee, 1 foot below the crown. Power pole on the landside (LS) toe. FS Date: 8/23/2013					

Photo 1 of 2 : UCIP_FA_2018_22073_37670.jpg



Pipe visible on LS slope.

LM Start	6.15	Rating **	M	Issue No.	970 (cont)
LM End	6.15	Issue Type +	En	Location *	

Photo 2 of 2 : UCIP_FA_2018_22073_37669.jpg



Pipe visible on WS slope.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	09/11/2018 09/11/2018	Richard Willoughby

LM Start	6.15	Rating **	M	Issue No.	81
LM End	6.15	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.871097°	37.871097°
				-121.330100°	-121.330100°
DWR ID	DWR_RD0524_01_s_2015_81				
Comment Code					
TR : Tree or limb					
Inspector Comment					
Fallen tree branches and limbs on landside slope.					

Photo 1 of 2 : FA_2018_RD0524_107_81_20180906_00141.jpg



Looking west at tree branches and limbs left on landward shoulder and slope. (Spring 2016)

LM Start	6.15	Rating **	M	Issue No.	81 (cont)
LM End	6.15	Issue Type +	Ma	Location *	LS

Photo 2 of 2 : FA_2018_RD0524_107_81_20180906_00142.jpg



Looking south at tree branches and limbs left on landward shoulder and slope. (Spring 2016)

LM Start	6.20	Rating **	U	Issue No.	86
LM End	6.20	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.870388 °	37.870388 °
				-121.329840 °	-121.329840 °
DWR ID	DWR_RD0524_01_s_2016_86				
Comment Code					
PR : Prunings					
Inspector Comment					
Large pruning pile left at landside toe.					

Photo 1 of 1 : FA_2018_RD0524_107_86_20180906_00150.jpg



Looking west at prunings at landward toe and berm.

*** Location**

LS : Land Side N/A : Not Applicable
WS : Water Side
CR : Crown

**** Rating**

A : Acceptable N : Not Inspected/Rated
M : Minimally Acceptable C : Corrected
U : Unacceptable A/W : Acceptable but Monitor & Maintain

+ Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement